JPRS-WER-86-098 6 OCTOBER 1986

# West Europe Report

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in <u>Government Reports</u>
<u>Announcements</u> issued semi-monthly by the National Technical
Information Service, and are listed in the <u>Monthly Catalog of U.S. Government Publications</u> issued by the <u>Superintendent of Documents</u>, U.S. <u>Government Printing Office</u>, <u>Washington</u>, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

# WEST EUROPE REPORT

# CONTENTS

# POLITICAL

BELGIU	M	
	Dissension Rife at Flemish Socialist Party Summit (Guy Duplat; LE SOIR, 23-24 Aug 86)	
SWEDEN		
	Lars Werner Comments on VPK Executive Committee Meeting (Magdalena Ribbing; DAGENS NYHETER, 1 Sep 86)	
	Papers View Future of Conservatives Under Bildt (SVENSKA DAGBLADET, 24 Aug 86; DAGENS NYHETER, 31 Aug 86)	,
	Strong Ideological Emphasis, Editorial Conservative Profile Threatens Unity, by Sven Svensson	
	Briefs Continued Aid to Vietnam	1
	MILITARY	
DENMARI	K	
	Defense Minister: 'Footnotes' Have Hurt Image in NATO (Nils Eric Boesgaard, Ole Dall; BERLINGSKE TIDENDE, 16 Aug 86)	1:
	Security Council Study Labels Protective Defense 'Absurd' (Michael Clemmesen; BERLINGSKE AFTEN, 8-14 Aug 86)	14

	Civil Preparedness Official Points Out Deficiencies (Michael Elmquist; BERLINGSKE TIDENDE, 13 Aug 86)	19
FEDERA	L REPUBLIC OF GERMANY	
	Armored Vehicle Industry Facing Uncertain Future (WEHRTECHNIK, Aug 86)	23
PORTUG	AL	
	New Military Commander in North Seen as 'Hardliner' (O JORNAL, 14 Aug 86)	40
SWEDEN		
	Parliamentary Commissioner: Country Ill-Prepared for Spetsnaz (Editorial; DAGENS NYHETER, 22 Aug 86)	42
	Submarine Net Used in Search for Suspected Intruder (DAGENS NYHETER, 22 Aug 86)	44
	Briefs Norway Buys Trainer Aircraft	45
	ECONOMIC	
BELGIU	M	
	Verhofstadt's Role, Views on Budgetary Discipline (LE SOIR, 30 Jul 86)	46
	Role of Verhofstadt, by Guy Depas Verhofstadt on Budget, by Beatrice Delvaux, et al.	46
FRANCE		
	Leading Exporting Sectors of Economy Enumerated (LES ECHOS, 18 Aug 86)	52
	Latest Inflation Figures Analyzed by Product (LES ECHOS, 26 Aug 86)	54
	Characteristics of Unemployed Workers Revealed by Poll (Alain Lebaube; LE MONDE, 29 Aug 86)	56
SWEDEN		
	Industry Group Forecast Strong Growth for 1987-88  (Jan Magnus Fahlstrom; DAGENS NYHETER, 23 Aug 86)	58
/7310		

POLITICAL

BELGIUM

DISSENSION RIFE AT FLEMISH SOCIALIST PARTY SUMMIT

Brussels LE SOIR in French 23/24 Aug 86 p 2

[Article by Guy Duplat: "Facts and Rumors..."]

[Text] Will the next few months be Indian Summer for Van Miert's tenure as leader of the Flemish Socialist Party? Does the infighting among its top echelons worry party stalwarts? HET VOLK and DENIEUWE GIDS, both of which happen to be pro-CVP, announced on 21 August that Karel Van Miert, "charismatic" chairman of the Socialist party since 1977, would be challenged and that the party chairmanship could revert to Ghent MP and attorney Luc Van den Bossche. The complaints reportedly stem from Van Miert's falure to garner as many votes as anticipated, and, more to the point, his having let slip any chance of the hoped-for amicable sharing of power, by having taken too hard a line. According to the Christian Democrat newspapers, Luc Van den Bossche was more of a moderate and hence "more acceptable" to the PVC, should the time come when a change in the governing coalition would become indispensable."

Former Deputy Prime Minister Willy Claes, who is still by way of being the "father" or record to the SP's "new look," categorically denies such assertions. "I have some authority," he admitted, "to speak for the whole party. And I tell you that these stories are nothing but a huge joke. Next spring, an administrative congress will meet to appoint the new chairman, and Karel Van Miert will be the sole candidate to succeed himself. All these rumors merely go to prove that the Christ Democrats in Flanders are in trouble, and are trying to hide the fact by blowing smoke over the real nature of those troubles. I tell you that the climate within the SP has never been so serenely unruffled as it is right now."

This is not the first time there has been dissent and rumors of dissent at the top of the party. And, as always in such cases, the truth is not quite so simple as the gossips would have it.

Of course, at the top level of the SP, as in any other party, there are arguments, disagreements, and differences, and sensitive strategies to be hammered out. And there are unquestionably occasions on which Messers Claes and VanMiert have not seen eye to eye, just

as Messers Tobback and Van Miert are not always tuned to the same wave-length. Hitherto, though, these whispers and rumors have never led to a change of chairmen, or to any of the heralded rifts. Van Miert is still the unchallenged chairman.

Over the past several years, there have indeed been indications of different "lines" within the party. The advent of Van Miert, Tobback, Wilcockx & Co. at the SP summit, with their pacifist issues and Third-World sympathies, and their openness toward the Christians was not everybody s cup of tea. And the Old Guard had never turned its coats to match Chairman Van Miert's new clothes. Similarly, a Willy Claes, who kept his young Turks safely tucked under his wing, has often appeared to be more of a moderate, a man more ready to sit down and talk things over, better prepared to become the next Prime Minister to head a center-left coalition.

Even so, the SP's "new" hard line showed no visible signs of softening. In the last European elections, the party walked off with what can only be described as a triumph, and Van Miert was top man in the popularity polls.

True, the sequel was not all that brilliant. Last October, the SP win fell disappointingly short of expectations. The Socialists wound up, once again, outside the ranks of government. Their socioeconomic program and their radical-pacifist approach barred them from both the chance of overturning the national governing alliance and that of reconciliation with the French-speaking Socialists and their lower profile.

The pacifist ardor had palpably cooled. Agreement was reached with the SP on practical socio-economic issues. At Luc Van den Bossche's invitation, Guy Spitaels traveled to Ghent one evening and issued his now-famous declaration: "We are friendly enemies." Karel van Miert made a few overtures.

This change in strategy was not altogether painless, though. When Van Miert made his overtures, Tobback, SP whip in the Chamber, dashed to slam every door that had been left ajar. Luc Van den Bossche—yes, again—picked up some of Van Miert's statements in the wake of the latest slaughter by the "Walloon Brabant killers" at Alost in 1985. Be it noted that the SP was strangely silent last May and June during the strike against Val-Duchesse, but that it was quick to pick up the ball—late July and issue a scathing denunciation of the government's final decisions, particularly now that, while some Flemish Socialists are tempted to make sheeps'eyes at the CVP,

the CVP is unmoving as marble. After its quasi-religious election campaign against the SP last October, the CVP has sealed its doors hermetically. Jean-Luc Dehaene told us so again in an interview

he gave us late in August. "A change in the coalition," he told us, "is more remote than it has ever been. There is no credible alternative."

6182

cso: 3619/62

POLITICAL

LARS WERNER COMMENTS ON VPK EXECUTIVE COMMITTEE MEETING

Stockholm DAGENS NYHETER in Swedish 1 Sep 86 p 12

[Article by Magdalena Ribbing: "'Abolish Collective Association': Lars Werner Pressures Social Democratic Party"]

[Text] The Social Democrats must now abolish collective association, Lars Werner, the head of the Left-Wing Communist Party (VPK), said after a VPK executive committee meeting Sunday. It is better for the Social Damocrats themselves to abolish collective association than forcing a group opposed to it to come forward, Lars Werner said.

Over the weekend the VPK executive committee discussed a number of issues, among them the questions of introducing taxes on production (proms) and concentrating on low wage earners instead of lowering marginal taxes. The party program which is about to come out was also discussed, and across the country a basis is now being laid so that gradually it will emerge as the proposal the executive committee will go along with.

Collective association which the VPK wants abolished must go now, Lars Werner told DAGENS NYHETER after the meeting. But we shall await the debate in Parliament before deciding how to vote. First of all, the VPK wants the Social Democratic Party's leadership to abolish collective association.

The VPK will now pay calls on trade union branches throughout the country which have collective association. In this manner the Social Democrats' leadership will be influenced.

Concerning the introduction of a real interest rate, the party's executive committee was of the same opinion as it was in 1984, when it was suggested that the Social Democrats investigate it. High interest rates and low inflation need not be a cause for satisfaction only for insurance company dividends.

"We want to use the billions which will come in with real interest rate taxes to scrap the value-added tax on food," Lars Werner said. "And I hope the Social Democrats do not succumb to the well organized campaign which the insurance companies have initiated to fight the real interest tax. You don't deprive pensioners of their money without depriving the insurance companies of some of their dividends.

There are several sides to this issue," the head of the VPK said.

12789

CSO: 3650/302

POLITICAL

# PAPERS VIEW FUTURE OF CONSERVATIVES UNDER BILDT

# Strong Ideological Emphasis

Stockholm SVENSKA DAGBLADET in Swedish 24 Aug 86 p 2

[Editorial: "Carl Bildt Takes Over"]

[Text] On Saturday Carl Bildt was elected as the new head of the Moderate Coalition Party (M).

In Ulf Adelsohn's five years as head of the party, the M made its policies more tangible. Views which formerly had been formulated in theory were put into real practice in Parliament, county councils and municipalities. This is work from which the M will obviously derive great benefit in the years to come.

At the same time, the series of successes was broken in the 1985 elections. And the M is now fighting to recapture the position of leading nonsocialist opposition party.

Carl Bildt's speech had a strong ideological coloration. Its central theme was the role of the M as carrier of the liberal-conservative tradition of ideas.

This was naturally no accident. One of Bildt's teachers was the late Bertil af Ugglas, the party secretary of the M, one of his party's most interesting intellectuals and one of the architects behind the successes of the 1970's.

Bertil af Ugglas brought with him into political work essential assumptions derived from an analysis of society, the historical perspective, a critical reflection on the current state of things, and the capacity to have an intuitive knowledge of every development. Without a well thought out analysis of society, putting together a reliable political alternative was not worth the effort either.

And he found a disciple and like-minded colleague in Carl Bildt, who was a coworker of Gosta Bohman's at the time.

The inaugural speech gave a very clear message about the role Carl Bildt wants the M to play in the social debate. He wants to give his party a broader

mission than just drawing up lists of measures and voting in political conventions. Whether he gets what he wants, and whether he succeeds in his new role, the M as well will influence the intellectual climate in Sweden.

This is a high ambition, but a necessary one for a party which views increasing politicization as a threat and not an opportunity. Sitting in political conventions and speaking out against politicization and manipulation from above, representing one's fellow citizens before the big public bureaucracies makes rather different demands on ideological consciousness and an understanding of society outside politics than does being one among several participants in the expansion of the public sector.

In his address, Carl Bildt referred to both the M's conservative tradition and its liberal side. He spoke of the meaning of values and standards, of historical links, and he defended the small units in society in a way which is not usual in Swedish political debate.

But Bildt also presented a rather different dimension of those liberal ideas than the one which in earlier decades constituted the central point of M policy. The economy and a discussion of the economic system did not predominate as strongly as they usually do when people from the M speak.

For one thing, there is a natural displacement of a central point in the fact that it is no longer particularly original for people from the M to speak in favor of a liberalization of Sweden's economy. The positions of the M in this regard are well known. And inasmuch as since the election the Liberal Party has more and more come to be identified with its traditional line, no nonsocialist party can compete with the M over who will emerge with the most liberal view on economic issues which divide the system.

But there is also a second explanation of Bildt's choice of wider efforts. Indeed, the liberal element in M policy has a number of reasons other than those which are connected with our economic system and our prospects for defending material well being.

Liberalism in its classical form also has a human face. And this emerges so very clearly when liberal policy is supported and completed by a conservative attitude.

Bildt's belief in progress played a major part in his address. But visions of change and renewal must be based on experience in order to be recognized as reliable. The classical liberal optimism about development can easily acquire the appearance of naivete if it is not based on a profound understanding of those conditions which have given rise to our civilization.

Of not the least relevance in this regard is the view of man as an individual and a fellow citizen. For socialists, politics is the art of the engineer, manipulative in its character. For the traditional conservative, politics is political science and hovers above society. But for the liberal-conservatives of today, the political mission must truly be a mission. And if it is to be accomplished, the commissioner must also be completely respected.

The part of Bildt's address which unquestionably met with the greatest sympathy on the part of his listeners was the part which, starting out with a poem by Lars Gustafsson, dealt with the M's view of man. The M meeting had just elected a new chairman. When Carl Bildt spoke of man as unique, unpredictable and individual, the meeting also approved him as its new political leader.

Carl Bildt believes in a renaissance of ethics and moral issues in the debate over society. Whether he prevails or does not, much depends on the members of the M themselves. If they are successful in further broadening the ideological debate and adding a more profound dimension to it, in the same way Gosta Bohman once succeeded, then Bildt's prophecies will come true.

So the M has advanced its positions and elevated the level of Sweden's debate over society. The latter is truly as important as the former.

# Conservative Profile Threatens Unity

Stockholm DAGENS NYHETER in Swedish 31 Aug 86 p 16

[Commentary by Sven Svensson: "Bohman Line Emerged Victorious in Moderate Coalition Party; Nonsocialist Fight Put On Hold"; first paragraph is introduction]

[Text] Carl Bildt's "speech from the throne" one week ago was full of indications which portend a fight among the nonsocialists. There are also clear signals in the speech that the Moderate Coalition Party (M) under Carl Bildt wants an international role for itself.

The Bohman line was emerged victorious in the M since the abatement of the post-election defeat shock. Gosta Bohman's summer speech in Furusund and Carl Bildt's inaugural address after the election of the party leader were carbon copies of one another. When the fall political season kicks off in earnest, the usual civil war within the opposition for general nonsocialist voters will recommence.

As early as the electoral commosion in 1982, the M was sticking knives in the back of the Falldin-Ullsten government. The nonsocialist centrist government which intervened, to the Social Democrats' unconcealed joy, suffered major disgrace on account of the tax settlement reached on that incredible night and the centrist line negotiations with the Soviet Union over dividing the Baltic Sea along with the submarine violations.

According to Ulf Adelsohn, Russian soldiers breakfasted on Swedish islands and Carl Bildt delivered a security policy program which was the kindest towards NATO and the military which has been seen in Sweden in many a moon. Only armaments could guarantee peace and the liberation of Eastern Europe was a prerequisite for peace.

Ulf Adelsohn soon changed his tune. When the M national committee met at Parliament House at the end of October 1984, Adelsohn said the following in his introductory address:

Phoenix Bird (Liberal Party)

"We of the M shall put together our policy according to the way we think Sweden ought to be governed. And of course we shall do so based on our own assessments. But we are well aware that without a majority of our own, no one can dictate policy, indeed it can scarcely happen even when there is such a majority. For us to win a hearing for our policy, we must first of all show strength in elections, but we must also have opportunities to win support from the Liberal and Center Parties through mutual give and take."

The most important factor behind Ulf Adelsohn's change of course was the fact that the M, with its 23.6 percent in the 1982 election, became the nonsocialist party which clearly dominated. Buoyed by the electoral result, Ulf Adelsohn declared himself the nonsocialist candidate for the prime ministership.

But Ulf Adelsohn did not settle the debate over the system change with the Social Democrats in the commotion of the 1985 elections. The dreams of the M about becoming the comprehensive nonsocialist coalition party were shelved for the forseeable future. In its electoral surge, Liberal Party leader Bengt Westerberg rose up like the Phoenix Bird from the ashes, and walked off with frightened general nonsocialist voters.

The election of Carl Bildt as leader of the M just a little over one week ago shows that the Bohman line about the M's profile is returning to a place of honor after a brief period with Adelsohn. In his comments, Bildt said that he sees himself as the leader of the M. He could not give any special pledges about nonsocialist three-party cooperation.

M philosophy is the following:

Three-party cooperation is fine if the M benefits or if it can be utilized to harm Rengt Westerberg or Karin Soder as the case may be with swing general nonsocialist voters.

Seesaw Principle

This egotistical party attitude is embellished by the M's seesaw principle. The message of this principle is that the more imposing the M becomes at the far end through sharply defined policy, the greater are its chances of neutralizing the Social Democrats and the Left Wing Communists on the other end.

This analysis is showing cracks. The historic change of government in 1976 was brought about first and foremost by the fact that the Center Party made incursions into the Social Democratic Party, which pursued an overly large-scale policy on nuclear energy and the environment, and in the 1985 debate on the change in system, the Social Democrats managed the reverse, thanks to the scare from the right.

Spearhead Again

Return to the Bohman line, especially after the electoral defeat of 1985, means that the Liberal Party and the Center Party will get to act as spear-heads against the Social Democrats, while at the same time they run the risk of being stabbed in the back by the M.

In one important respect, the political situation is really altered. After they defected from two nonsocialist governments in Bohman's time, the M no longer has any obvious authority as the clearest reason for a three-party alternative.

For this reason Carl Bildt with his inaugural remarks probably put himself in a defensive position. Bildt will frequently get to answer questions about his notions of nonsocialist three-party cooperation and how the vision of a nonsocialist three-party government is coming along.

#### Rejected

Here too the change in party leadership points to a change of course in M policy. Carl Bildt's inaugural address was only a sample of his criticism of society. Without naming names, just about everything the Social Democrats have done for more than 40 years in government was rejected.

In the collectivism which the Social Democratic Party stood for was born the art of the social engineer. Ambitious time-study experts who were its pioneers came to look at everyday Swedish life and grew horrified at an educational institution as old-fashioned as the family, at a cramming machine as antiquated as the school, and at a governing apparatus as impractical and static as the state governed by law, as Bildt's rhetoric put it in the bedecked second chamber room.

And the result, according to Carl Bildt, was an empty individual, brought up among suburbs, glass and concrete, with declarations of incapacity by the social services and overseen by Statistics Sweden, entangled in Inconvenience-Sweden's maze of rules, warnings, and cares.

# Not Taken Seriously

Unfortunately for Carl Bildt, there is no one who really took his double blend of neoliberalism and conservatism seriously. Ingvar Carlsson has clearly had more important matters before him than debating the newest arrival in the guild of party leaders.

Bildt himself spoke of a third difference on his coronation as party leader. Carl Bildt has a more international orientation than Ulf Adelsohn, who did not even want to be the head of the Swedish delegation to the Nordic Council.

Carl Bildt's fortune was made when the submarine commission was at work.

In the report on the violations in Harsfjard, the Soviet Union was singled out as responsible for the violations and, as a deft master at formulations, Carl Bildt had many fingers in the pie.

Bull of Excommunication Produced Public Relations
The bull of excommunication which Olof Palme, in the name of the entire
government, promulgated by degrees against his relation Carl Bildt on account
of an excursion to the Pentagon added extra zest to the soup. The bull was
good public relations for Bildt.

Since his elevation to the position of party leader, Carl Bildt has made proportionately positive statements about Palme. Bildt no longer questions the important role Palme played in shaping opinion in the foreign policy area, and Bildt is willing to become a new Palme.

Bildt underwent his first foreign policy test during the confusing summer debate over sanctions against South Africa. The Social Democrats slipped and slid at the beginning, and, in usual party secretary fashion, Sten Andersson attempted to repair the damage by asking party leaders to make a common statement.

South Africa is a hard nut for the conservative parties to crack, and after a good deal of clamoring about one-horse towns, Bildt, through some minor alterations in the statement, had a reference to a resolution in Parliament from last spring inserted.

That Bildt got the statement approved is due above all to the fact that Bengt Westerberg and Karin Soder were altogether too quick to associate themselves with Sten Andersson's proposal.

European Communities in Transition

In the international arena, policy towards Europe in particular is in rapid transition and development. Even more countries are becoming members of the European Communities (EC). In Denmark the full membership is a controversial issue which has been settled. Norway is said to be knocking on the EC door and it is not a historical given that Sweden can continue with its free trade agreement into eternity.

Furthermore, in Sweden domestic political decisions depend on EC development, which up through 1992 will create a free market for goods, capital, services and people.

Sweden is now linking its conduct on the South African issue to the EC countries' position, catalytic converters on cars depend on the EC's decision and the same is true of research and technical development to keep even with the United States and Japan.

As the leader of the Social Democratic Party, Olof Palme played an important role shaping opinion in world policy. Carl Bildt as the leader of the M-the party of freedom and progress, according to his own characterization at the coronation-is striving for a European role. Through an extensive network of contacts, primarily among brother parties in various countries, Bildt has laid good groundwork for his international appearance on the Swedish political scene.

12789 CSO: 3650/302 POLITICAL SWEDEN

#### BRIEFS

CONTINUED AID TO VIETNAM--Last Tuesday, SIDA (expansion unknown) decided to suggest to the government that Vietnam receive continued aid of 60 million kronor in order to improve its electric system. The aid would be given during a three-year period for the purpose of increasing reliability of service and production of electricla energy. It concerns, among other things, improving hydro-electric power stations and buying reserve parts and equipment. SIDA also decided to suggest continued aid of 10 million kronor for a trade school in conjunction with the pulp and paper-mill, Bai Bang. [Text] [Stockholm DAGENS NYHETER in Swedish 20 Aug 86 p 11] 12339

CSO: 3650/300

MILITARY

DEFENSE MINISTER: 'FOOTNOTES' HAVE HURT IMAGE IN NATO

Copenhagen BERLINGSKE TIDENDE in Danish 16 Aug 86 p 7

[Article by Nils Eric Boesgaard and Ole Dall: "Engell: NATO Surprised at Denmark"]

[Text] Defense Minister Hans Engell thinks that the footnotes have harmed our reputation. Lasse Budtz (Social Democratic Party) would like to see fewer footnotes, and he does not think that the government has done enough to prevent them. Both politicians are happy about the NATO dialogue between Denmark and Norway.

"It would be nice if we together with Norway can come to a common stand on the wording of NATO policy."

Defense Minister Hans Engell (Conservative Party) comments thus on the agreement between the Danish and Norwegian prime ministers regarding the fact that the two countries should attempt to coordinate their efforts in NATO and put the brakes on footnotes to communique texts.

As defense minister, Engell has had to deliver footnotes, among other things, in connection with communiques on NATO missiles in West Europe and the so-called Star Wars Project (SDI).

Hans Engell says:

"Today it is indeed the case that the very communique texts which are framed by the alliance are read first and foremost by security policy experts in the East and West—and to a lesser extent by the people of the countries they are directed toward. They are very complicated and it is necessary to be able to read between the lines, to make interpretations of them, and to be in possession of not inconsiderable expertise in order to understand them."

"The wording is an expression of the outcome which has been arrived at in the discussions. When there are, all the same, countries which do not agree, then it is necessary to detach oneself by means of footnotes."

Social Democratic Party: Fewer Footnotes--Splendid

Hans Engell says about the consequences of the Danish footnotes in NATO:

"There is no doubt that the footnote policy has harmed Denmark's reputation among the allies. It is obvious that the other countries do not comprehend Denmark's critical attitude toward the medium-range missiles, which we will have none of."

"Also not understood is the Danes' refusal to pay for the joint NATO infrastructure, and there is surprise over the fact that Denmark refuses in advance to take part in the discussions about SDI at a time when the realization of the project lies 5 to 10 years into the future."

The Social Democratic Party's security policy spokesman, Lasse Budtz, is happy about the contact between the Danish and Norwegian governments.

"We think that it is a splendid idea to work for fewer footnotes. It could certainly be imagined—as Norwegian Prime Minister Gro Harlem Brundtland (Social Democratic Party) apparently suggested—that an attempt was made to have the communique texts so worded as to not to try to force a number of countries to sign something which they actually are against," Lasse Budtz says, who names two reasons that the Danish footnotes have been necessary:

"First, the Danish Folketing majority in some cases did not agree with the NATO organization and the NATO majority; and, second, the government did not attempt to a sufficient degree to word the communiques so that the footnotes could be avoided."

Lasse Budtz does not think that the NATO coalition between the Social Democratic Norwegian government and the four-party-coalition government is an expression of Norwegian criticism of the Danish Social Democrats' stand. Budtz refers, among other things, to the discussion he had on Wednesday together with party comrades Kjeld Olesen and Svend Auken with Sweden's and Norway's foreign affairs ministers. "It was a question of almost completely identical views," Lasse Budtz says.

8831

CSO: 3613/189

MILITARY

SECURITY COUNCIL STUDY LABELS PROTECTIVE DEFENSE 'ABSURD'

Copenhagen BERLINGSKE AFTEN in Danish 8-14 Aug 86 p 7

[Op Ed Article by Michael Clemmesen: "Nonoffensive Defense Deserves Oblivion"; first paragraph is BERLINGSKE AFTEN introduction; passages within slantlines published in italics]

[Text] The Security and Arms Reduction Policy Committee (SNU) has just published Major Michael Clemmesen's pamphlet "Regarding the Nonoffensive Defense". Major Clemmesen, who, among other things, has been a member of SNU's chairmanship and of the Armed Forces Staff's longterm planning panel here analyzes the ideas concerning the nonoffensive defense.

As a step along the Danish left wing's path toward security policy maturity, the nonoffensive defense model deserves not to be forgotten. As a solution for Danish defense problems it is absurd.

At one period the security policy debate here at home circled around the positive sounding ideas of the Nordic nuclear-weapons-free zone and the "nonoffensive" defense system. For a rather long time considerable uncertainty prevailed regarding what the concept of a "nonoffensive defense" covered, but the past year the situation has improved in the sense that two models have been introduced under the fashionably correct name: Anders Boserup's Danish version of the West German Horst Afheldt's front technology territorial defense, and the Social Democratic nonoffensive defense. Boserup's model has been supported by the non-pacifist section of the SF [Socialist People's Party].

The Social Democratic model has very little in common with Boserup's, over and beyond the name. It is actually just a question of a proposal for adjustments of the present defense structure, a proposal which contains elements of varying logical content and coherence among themselves. This is due to the fact that the roots of these elements are quite different. Accordingly, only some parts of the Social Democratic proposal can be viewed in logical coherence with the ideas which lie behind the West European (West German) debate on a nonoffensive or reformed defense of West Europe. In one area it can be said that the Social Democratic proposal is in direct antagonism to this debate's stands. The proposal is being contemplated of withdrawing a brigade from the solidary defense of the Danish-German area with a view

toward the guarding of the reinforcement infrastructure against quite improbable threats. Danish dependence on the USA's and Great Britain's defense policy decisions and actions regarding our country will thereby increase. At the same time the influence we have directly today on our defense in the United Command will be reduced further. The step will, besides, possibly be able to have both a military and political destabilizing effect and accordingly come to clash with the goals which the West German Social Democrats have with their defense policy ideas. An isolationist step will be taken without regard for relevant military and political factors.

Because of the fact that the Social Democratic proposal has been so incoherently put together, it is unsuited as a point of departure for a general analysis of the monoffensive defense. I will take my point of departure in the purest of the models presented in the European debate, that of Horst Afheldt. According to it, the defense is to be based partly on small units with antitank weapons which are distributed over the country in a "network," and in part it is to contain a smaller number of units with somewhat longer-range missile weapons. The defense works by the attacker's massive units and tanks, etc., gradually undergoing attrition during conquest of the territory. The certainty of heavy losses will have a deterrent effect and consequently prevent the attack. The model cannot be said to be threatening, because it can be effective against the enemy only after he has advanced into the defenders' land area. Among other things, by always being prepared to make an effort, but also by not threatening, the model will have a stabilizing effect in a crisis situation.

#### Is It Defensive?

A military defense must be able to protect the country's assets and interests. If a country wants only to protect what it has against other countries' military encroachments, it can be said that the defense system has served these interests totally if it can prevent the situation--a war--in which such attacks are probable. If it is not able to prevent a war all the same, the defense's mission, however, must still be to protect the country's assets and interests. This implies, among other things, that the military forces must be able somewhat effectively to counter an invasion and the direct effect of weapons. the war quite definitely will be a nuclear war, this second mission is impossible. But if this catastrophe is prevented, if the conflict is kept at a conventional level, the situation is a different one. For it is not impossible to establish reasonably effective coverage of considerable parts of one's country's assets. The network defense has relinquished beforehand the affording of such physical coverage. As the guerilla seeks cover among the people and the assets which it must be the defense system's mission to protect in a war, too, and thereby makes it probable that the people and assets will be exposed to massive destruction in battle. The more effective the forces are and the more there are of them which join the effort, the greater and more widespread the destruction will be.

Therefore it can be said that a network defense is certainly defensive in the sense that it is not offensive. But in the word "defensive" resides also an ability to ward off and protect. Such an ability is not, as mentioned, the

idea the network defense is to have. If it is to operate in a war, it is necessary to face the fact that the country will be exposed to Beirut's destruction. Based on these considerations it can be said that it is false advertising to characterize the network defense as "defensive"; /in its main idea it is deterrent, just like nuclear forces./ As they, too, it is in all essentials to be effective by preventing war and attacks. However, there is nothing invidious about this if it can be expected that this type of territorial defense—as the Swiss model—will be effective in its prevention.

#### Is It Effective?

It is presumed that the network defense will be effective, i.e., war preventing, in two ways, each associated with its possibility for the start of a war. By not being threatening, the fact is attained that in a crisis situation the Soviet Union will not /feel itself forced/ to "strike first" in order to avoid NATO's striking first. By its high readiness to make an effort it will be guaranteed that the Soviet Union will not be presented with NATO weaknesses which one could /feel tempted/ to exploit in a crisis.

If it were only the first possibility which appeared realistic, it would be logical to proceed to total unilateral disarmament rather than maintain a defense system, for nothing is, viewed first-hand, less threatening than no weapons. It is accordingly also regarded as a possibility that the Soviet Union could feel tempted toward aggression. Accordingly, the model stands and falls in its supporters' eyes, too, by the fact that there is probability that it will be judged as militarily effective by the Soviet general staff (as well as implicitly by the fact that Western political leaders have such faith in the effectiveness of the deterrent that in their political decisions they are able to ignore the fact that if it goes wrong all the same this defense has no protective effect).

Viewed from Soviet military quarters, the effectiveness of this Western defense system depends on to how great an extent it is able to counter and ward off Soviet military and political opportunities for action.

The network defense is based on the attrition of a massive attack by armored forces into West Europe, an attack which as a minimum has the Federal Republic of Germany's territory as a geographical target. The defense system's effort must ensure that a break takes place, owing to fatigue, in which the sides are forced to the negotiating table. The network defense must guarantee that West Europe is not confronted by an attack with a fait accompli.

Two questions arise for the Soviet general staff:

/1. Can the defense system cope with a massive attack?/

As mentioned, the nonoffensive defense is based on a more or less stationary system with many very small units with light specialized weapons and fewer somewhat larger units with longer-range specialized weapons.

It is the very high degree of specialization which creates distinct limitations for this defense system. Its effectiveness is based on the fact that the attacker will be able to act only in the way that the defense system has been specialized to counter. It can be said already today that the Warsaw Pact's land forces--for other reasons--have changed tactics and the composition of units to such a high degree that the network defense's assumptions with regard to the attacker's weaknesses are no longer valid. Short- and longer-range antitank and air defense weapons cannot do much against the growing and ever better armed infantry and against the ever enlarged and more effective conventional artillery which are part of the Warsaw Pact's forces. If considerable losses are to be avoided it is possible that the Soviet attack's tempo will have to be set somewhat lower than perhaps could be desired. But, so viewed, this is also acceptable, for with West Europe's defense structured as a network defense, it will be possible to be able as a matter of course to take the time desired. No Western action--aside from the terribly demonstrative and, under the model's conditions, not very probable stepping up to the use of nuclear weapons--will be able to worsen the attacker's situation so much that he is forced to consider a negotiation solution. It is, moreover, a considerable weakness of the network defense that it will come to anything other than selective application only if the attacker stupidly seeks to conquer the entire territory directly by military means. This is not very probable. He will go after the economic and political key areas, after which it can be counted on that the resistance will cease after a short time. Only a very limited part of the stationary network defense system will get to work.

# /2. Can the new defense system be outflanked?/

Because of this model's unequivocal concentration on the military situation on land and, within this, on the duel between military forces, it is in reality like a shield which shades off the light without covering the vulnerable part of the body. The fact has been ignored that the destruction of the opponent's military forces is not the goal, just one of the paths toward the goal, to influence him to act as desired. /A second path/, which the model renounces, but which is still at the Soviet Union's disposal, is to influence the opponent's will to continue the fight by cutting him off from his supplies. West Europe is vitally dependent on communications between the area's individual parts, as well as on overseas communications. Internal communications and the production apparatus are directly exposed by the network defense (accordingly, as far as Denmark is concerned, communications, vital for Zealand, over the Great Belt), and the same holds true for overseas communications. It could certainly be said that maintenance of the network defense on dry land does not rule out the maintenance of NATO's fleets, but this is not a satisfactory answer. A change to the network defense will free such large Soviet air forces (for air supremacy over a certain altitude will be totally surrendered after this and not contested) that the situation in the Norwegian Sea, North Sea, the Channel and the Mediterannean will be drastically changed to the Soviet Union's advantage.

/A third path/ will be the more direct path to West Europeans' will to fight, i.e., to the credibility of the deterrence. It would be possible—as has been

done under other conditions right since NATO's establishment—to play on West European vulnerability, which with the introduction of a network defense has been made absolute and unilateral. It will all the time—and correctly—be able to be stated that to carry the defense system into effect will be to carry into effect one's own destruction, and without achieving any considerable defense effect. Adaptation under pressure will be the only rational expedient, as Denmark did during the period of 1933—1943 and as Poland has done in this decade. This will be the advice the professional military advisors will have to give if they are to advise rationally.

Even within this model's very narrow bounds, the network defense is not effective, and because of the considerable field of opportunities for action which lie outside the model's focus and possibilities, it deserves only to be forgotten as anything other than a step along the Danish left wing's path toward security policy maturity. This applies even if the model is extended to all of West Europe (as is desired); to see it as a solution to Denmark's defense problems is absurd.

It is only in one way that the debate about the nonoffensive defense--about both models--represents progress. It is the first time after the war that the political debate regarding the defense system here at home has revolved around possibilities and priorities.

8831

CSO: 3613/189

MILITARY

#### CIVIL PREPAREDNESS OFFICIAL POINTS OUT DEFICIENCIES

Copenhagen BERLINGSKE TIDENDE in Danish 13 Aug 86 pp 12-13

[Op Ed article by Michael Elmquist, cand. jur. [Bachelor of Laws] and section chief in the Civil Defense Administration with civil preparedness as his area of responsibility, and longterm employee of NATO Directorate for Civil Preparedness, Brussels: "Not Just Gunpowder and Bullets"; passages within slantlines published in italics]

[Text] Denmark's security policy is based on a "total defense." If the civilian side does not function satisfactorily, the defense system will lose its credibility.

Denmark is a member of NATO. Denmark's security is therefore inextricably tied to NATO's higher-ranking strategy. For years the supporting element of NATO's strategy has been that an armed conflict between NATO and the Warsaw Pact should be avoided through "deterrence."

The concept of deterrence includes the fact that it must be obvious to any adversary that if he begins an attack against NATO he will first have to defeat so strong a defense system that the attack's success will be uncertain, and, secondly, he will expose himself to retaliation which can inflict unacceptable losses on him. When one talks about the balance of power, it is therefore uninteresting whether there is a balance between the power blocs' ability to attack. The interesting thing is the balance between their ability to survive an attack and to retaliate for an attack.

It can be compared with the situation in a typical western: Two cowboys face one another, ready to duel. They are both equipped with an effective attack--revolvers--but the only defense consists in drawing faster and hitting more certainly than the opponent. The fight is inevitable. Now if one cowboy was dressed in a bullet-proof vest, would the other then dare to duel? And if they both were dressed in bullet-proof vests, then the fight would presumably be called off.

President Reagan has proposed that the USA put on a bullet-proof vest. It is called the "Strategic Defense Initiative" (SDI), but is better known by the name the "Star Wars Program."

It can be no surprise that the Soviet Union is an opponent of SDI, although SDI does not necessarily increase the USA's ability to attack the Soviet Union. For SDI increases the USA's ability to survive an attack and to retaliate for an attack.

West Europe—and Denmark especially—has neither the economic nor technical ability to copy the American Star Wars Program. The threat against our countries consists not (only) in ballistic missiles, but in attacks by land forces, amphibian forces or air—landing forces, attacks by bombers, chemical attacks and medium—range missiles with nuclear warheads. There is no possibility of stopping such attacks with laser beams from a satellite.

Do we have an alternative then? Do we have any possibility of ensuring that our people and our society can at all survive an attack? We must in any case realize that the military defense system's role is to beat off the enemy, to maintain Danish sovereignty, but not to protect the people against the consequences of an attack.

So we have in return the civil defense system. Sirens are to warn the people of a coming attack, air-raid shelters are to protect them (those there is room for) against the effects of the attack, and after the attack the deployment forces are to put out fires, rescue victims from the ruins and transport the wounded to hospitals. The civil defense system does not have the necessary strength and effectiveness today, but there is reason to believe that the existing shortcomings will be remedied. The political compromise which was entered into in 1984 laid the foundation for a redressing of the damage which many years of economic starvation had brought about.

The civil defense system is necessary, but however it is not sufficient. It is not nough for the people to survive an attack in the short term if after this they perish as the result of hunger, thirst or epidemics. The survival of the community in the longer term will depend on civil preparedness. The importance of civil preparedness increases in proportion to the community's vulnerability.

And the Danish community is becoming ever more vulnerable. There are many reasons for this, but the following can be underlined as the most important:

- 1. The concentration of production in larger units.
- 2. The rapid turnover of goods.
- 3. The dependence of production on imports.
- 4. The dependence of production and distribution on modern technology.
- 5. The individual consumer's dependence on electricity.

/Concentration in larger units/ is familiar in almost every kind of production. Of great significance for the community's vulnerability is, for example, the concentration of electricity production at a few but very large power plants; the production of batteries, which today is concentrated in a single factory;

the production of medicines and various kinds of equipment for hospitals (plastic bags for drops, pressurized bottles containing medical gases, etc.), which is performed at very few specialized factories. If a single one of these electric power plants or factories is hit, it can have catastrophic consequences for the entire community.

/The rapid turnover of goods/ is for good reasons a goal for any firm. Stock costs money, partly in direct expenses and partly in the form of the lost interest the frozen capital involves. But the shortage of stock also means the shortage of stockpiles. If production comes to a stop, the shortage will be able to be noticed immediately by consumers.

/A dependence on imports/ is unavoidable for a country which has so few raw materials as the case is in Denmark. Of course we can hope that trade with the other NATO countries will be able to be maintained under wartime conditions, but a major portion of our imports comes from countries outside NATO's area, from both neutral and Warsaw Pact countries. We have safeguarded ourselves in the area of oil with extensive oil reserves. If production is to be safeguarded we must also have reserves of other imported goods.

/The dependence on modern technology/ applies both within production and within the transport systems which are the prerequisite for products' being able to reach consumers. Electronic data processing systems are terribly vulnerable. Jolts, the effect of heat or electronic effects can put them out of operation. If the systems fail, in the best case it will result in considerable delays in production and distribution, and in the worst case, a total halt.

/The individual consumer/ is today far more poorly prepared to cope with an emergency than was the case during the Second World War. Food is stored not in cans, but in the freezer; the heating of homes and the preparation of food require electricity; personal hygiene requires running water, which again is dependent on electricity. Sweden is considering requiring that new houses be equipped with fireplaces in order to ensure the necessary heating and preparation of food in case of electrical failures. Here at home we know of ordinances which forbid the installation of fireplaces, not out of regard for the danger of fire, but out of regard for ensuring the necessary support for a district heating plant. That district heating is also vulnerable can be testified to by a whole lot of people in Aalborg.

The planning of civil preparedness in Denmark got the starting gun when King Frederik IX on the evening before Christmas Eve in 1959 at the hunting lodge in Trend ratified with his signature "Law No 342 Concerning Civil Preparedness." Since 1959 the planning has been concentrated largely speaking on securing the government's and central administration's functions in war. Most of the planning has been performed in the quiet, for plans on paper and air-raid shelter facilities do not attract the same interest from the media as tanks, submarines and fighter planes. The oil crisis in 1973 changed the perception a little. It became suddenly clear how sensitive the community is to political and economic pressure in the form of an embargo. The result was

the decision to build up oil reserves, financed by a (quite small) consumption tax.

With the legislative amendment which went into effect on 1 July 1985, a new element entered preparedness: Municipalities and counties now received the obligation of independently planning their civil preparedness. The importance of municipal civil preparedness can hardly be overestimated. The water supply, sewage system, trash collection, nursing homes, schools, and the dispensing of social services are some municipal areas which must be able to function during a war if the community is not to break down. If fathers are to be called up for military service and mothers must be able to function in an occupation of importance to the community—possibly with longer working hours—childcare services will be of direct importance for whether the total defense system will function. It has often been the experience that a soldier's efficiency is reduced if he does not have the assurance that someone is taking care of the family at home.

As a planning area, municipal civil preparedness is still in its childhood, and economic misgivings can hamper the child's growth. Worse is the fact that other areas of civil preparedness cannot even be said to be at the embryo stage. Preparedness of raw materials to ensure industrial production is lacking. There are not sufficient reserves of medicines to treat the patients which the armed forces medical service, the civil defense ambulance service and the counties' reserve hospital facilities have been built up to attend to. Even in a food exporting country like Denmark there are so many bottlenecks in production, manufacturing and distribution that there cannot be said to be any reasonable guarantee that consumers will be able to buy sufficient food in time of war.

Of course, civil preparedness costs money. Plans on paper cost small change; air-raid shelter facilities, emergency electric power plants and similar technical installations cost some money; and stockpiles cost a lot of money. Sufficient preparedness can obviously not be arranged for from one day to another. But in the coming time's negotiations toward the next defense compromise and the next compromise on civil defense and civil preparedness—or perhaps the total defense compromise which is to replace the two individual compromises—it will be of decisive importance that a political course be established toward the construction of civil preparedness which can contribute to making our (total) defense credible.

The concentration of production, the rapid turnover and the use of electronic data processing have, as mentioned, made the community more vulnerable, but have in turn also meant a better economy for the community as a whole. It is of course not in civil preparedness's interest to slow, stop or turn around the community's growth, but it is certainly also not unreasonable to desire that a small part of the socioeconomic gains be used to reduce the community's vulnerability. The preservation of peace is, in spite of everything, the most important precondition for the community's well-being.

8831

CSO: 3613/189

MILITARY

FEDERAL REPUBLIC OF GERMANY

## ARMORED VEHICLE INDUSTRY FACING UNCERTAIN FUTURE

Bonn WEHRTECHNIK in German Aug 86 pp 34-117

[Unattributed article: "No Worry-Free Future: The German Armored Vehicle Industry"]

[Text] Even though the acquisition of an additional 150 Leopard 2's has once again assured a certain level of employment in some companies within the German armored vehicle industry—the future of all companies involved in the development and manufacture of armored vehicles is really not worry free—regardless of whether they produce hulls or provide electronics. Despite the fact that—or actually because—capacity is not fully utilized, the courage exhibited by several companies to use in—house funds on development is note—worthy. And their efforts are not just aimed at the export market but also at the Bundeswehr.

"Moaning about a lack of work is what builders of armored vehicles do constantly"--is how many people lightly dismiss the complaints of the industry. In past years they did indeed have plenty to do. However, the federal government also admits that the production outlook for the next few years is not exactly rosy. The sixth lot of Leopard 2's, even though it is about to be increased by 100 as yet unproduced vehicles (in particular also to prevent another interruption in production within this industry), although somewhat more than just "background noise" for the industry--a production rate of 9 vehicles per month in contrast to 35 when the Dutch Leopard 2 was still coming off the assembly line--still does not fully utilize available capacity. There is nevertheless hope on all sides that at least this pace will continue for several years yet because no imminent large-scale production programs are anywhere to be seen. Upgrades of combat effectiveness are also no small matter and yet they mean work for only a few companies -- many companies which develop and produce components in particular come up empty-handed. This will be true as well when the Leopard 2 undergoes its first major repairs at the end of the decade at system suppliers Krauss-Maffei and Krupp MaK. That this work is not being done by private repair companies or in the Bundeswehr's own repair shops, on the other hand, does not please the private firms because their share of the pie is that much smaller.

What is being sought then is new production programs which will provide some work for as many companies as possible. The only problem is that the Bundes-wehr cannot be counted on to do much rescheduling regardless of how the threat

increases. However, there is a lesson to be learned from the miserable situation with regard to uneven work loads. Gearing up production too rapidly to too high a level, followed by an abrupt decline, sometimes to zero, is not only uneconomical but also dangerous—hopefully this will be taken into consideration in the production of the Combat Vehicle 90 (however it will look eventually) and a more continuous work load for industry will also be included in these considerations.

Expressions of worry about the future could actually be heard at all of the companies described briefly below--too many of them still base their hopes on the supposed better days which will dawn in conjunction with the Combat Vehicle 90 (KW-90). And these hopes are certainly set too high--and so from all sides comes the question of who will be the first of the three major builders of armored vehicles (Krupp Mak, Thyssen-Henschel or Krauss-Maffei) to have to give up the fight. For some time the odds were that it would be the Munich firm put up for sale by Flick. That this did not happen was probably due not least of all to the fact that--as the non-Bavarians put it--the company has a good "Strauss mafia" as its lobbyists. But there are also similar rumors from time to time of other system producers giving up the fight.

What is certain, however, is that the production capacity available to date will no longer be fully utilized on the average, even with the KW-90. To some extent, the situation with regard to some subcontracting firms is even worse, particularly those which have specialized too much in the production of components for armored vehicles. Relief through aviation programs—aviation and land-based technology are often processed in the same department—is also not in sight. And in some areas the competition is even increasing because armaments producers are attempting as much as possible to bring commercially available products into play. For example, otherwise civilian, somewhat "militarized" diesel engines could be used—opportunities then for companies which have not previously supplied the Bundeswehr and jeopardy for the current major suppliers.

Many companies place their hopes on exports. On the plus side in this regard is that export restrictions have been eased, especially with regard to Southeast Asia, and that it need not always be a Leopard 2 right away that is for sale. Expectations should not be set all too high, however, because as good as "export projects" may sound, the customer nations are trying as much as possible to develop their own production (whether they have the ability or not). At the beginning of each of these export programs, however, substantial amounts of supplies will still come from Germany, and electronic and optical assemblies will always come from Germany. In this respect, too, the subcontracting industries have the advantage. And thus it is also a good sign that within the export programs components from German firms are being used and not, as some years ago, components from abroad.

It would be nice if these in-house efforts within the industry would be taken into consideration in some form or another by the Bundeswehr, and also remunerated. Even if it is just a matter of a German military attache not shying away from appearing in uniform at the proper moment--companies themselves very much like the hard sell but protecting one's flank is also important. Some companies in the so-called armored vehicle industry--system

suppliers and subcontractors--and their programs are presented on the following pages.

#### AEG

In the aviation and special technology sector at AEG in Wedel (Holstein) about 500 people are employed in the armored vehicle division with sales of about DM 160 million annually. Included in the production program for the Leopard 2 are the weapons tracking system, the viewing assembly for the gunners, the on-board electrical power generator and the coarse-dust exhaust fan, as well as the gunner's viewing assembly for the Leopard 1.

Since the mid 1970's AEG, under the trademark Geadrive (GEA spelled backwards is AEG), has developed and supplied electrical aiming and stabilizing systems for battle tanks, antiaircraft tanks and other armored vehicles, both for new vehicles and for combat effectiveness upgrades. At present 55 electric drives are thus being produced for modernizing the Danish M-41 battle tank.

Under development is a digital scan converter (DSC) for the common-module thermal imager, plus a common-module based, optronic-sensor OFLA thermal imager for upgrading the combat effectiveness of the Gepard, and also for the Gepard, together with MBB, the FT 90 target tracker.

Of particular importance in terms of providing future work for the company is the recent decision by BWB in favor of the BT-41 duel simulators developed by Saab Training Systems and to be supplied by AEG. Initially, 560 systems are to be ordered for the Leopard 2, but further systems will surely follow.

#### Blohm + Voss

Providing a sufficient work load in the area of land-based military technology at the Blohm + Voss pier in Hamburg, which belongs to the Thyssen concern, depends greatly on the Leopard 2 program. All hull shells are produced there, as well as 50% of all Leopard 2 turret shells—the other 50% is subcontracted to Thyssen in Witten-Annen. The sixth lot was therefore welcomed in Hamburg and naturally there is hope for additional lots of the Leopard 2 even though over the long term they will likely no longer account for the work load experienced to date. Also in production are turret shells for the 115 Rolands of the navy and air force—Blohm + Voss had also already produced this shell for the Roland on a track-laying chassis, although this was a joint venture with France.

The production of the armored recovery vehicle 3 on a Leopard 2 chassis will most likely not provide work for a few more years--if hull production even goes to Hamburg. However, Blohm + Voss has already produced the prototype hull.

In terms of development this company is particularly active in the shielding sector--there are already new shielding arrays for combat effectiveness upgrades of the Leopard 1 or for converting the Leopard 1 to an antitank combat vehicle, so this program will likely also provide work. Nevertheless, layoffs in the production sector can probably not be avoided in the near future,

although the company hopes it can at least hold on to those employees with the pertinent knowhow. The results of the study prepared for the Federal Ministry of Defense concerning cost-effective production of armored vehicles will be included in the conceptual phase of the Leopard 3 project.

#### Clouth

The Cologne-based company, Clouth Gummiwerke AG, had sales of DM 281 million in 1985. It is active in the areas of conveyor belts, proofed fabrics, technical grade rollers, liners, and military technology. Rubber articles for military applications, particularly for tank weapons, make up a considerable share of the company's production. These articles include projectile-proof, protective track shields and added rubber armor, as well as rubberized wheels for nearly all German-produced tanks such as the Leopard 1 and 2 and the Jaguar 1 and 2 missile-equipped tank destroyer. Together with Porsche, Clouth also developed the continuous loop track for the Wiesel airdroppable vehicle.

#### Daimler-Benz

The Bundeswehr is also an important customer for an international concern like Daimler-Benz--even with respect to commercial vehicles. In addition, Daimler-Benz also developed the wheeled armored vehicles Fuchs and Luchs.

When the preliminary activities of the Defense Ministry regarding the KW-90 were in full swing at the end of the 1970's, there was a suggestion, based on experiences in developing the Fuchs and Luchs on the one hand and knowledge of the commercial vehicle technology planned for the 1990's on the other hand, to conduct a theoretical investigation of the extent to which the technical and tactical requirements of the KW-90 could be met by wheeled vehicles. stimulating aspect of the study on the KW-90 was to design a chassis for use in the highlands which would fulfill the necessary performance requirements using series-produced commercial vehicle assemblies without the restrictive prerequisites of the older wheeled vehicles mentioned above (ability to float, chassis identical to the transport truck, tire size 14.00-20 and engines with multifuel capability). The designs presented by Daimler-Benz then prompted the armaments sector to contract for the construction of a demonstration chassis which is to begin testing in the fall in Trier. The Bundeswehr is waiting to find out how it behaves in difficult terrain, while Daimler-Benz is awaiting test data for the final design of the components if that type of wheel concept should be selected for a development phase.

The 8 x 8 demonstration chassis is said to have the following characteristics:

- weight, about 30 metric tons
- weight per unit of power, nearly 20 kW/metric ton
- new tire/wheel system for large contact surface and emergency running
- tire pressure control system
- wheel suspension large enough for spring travel of Leopard 2 and hull crosssection with no intrusions
- turret race ring diameter same as for Leopard 2
- minimum number of individual metal plates comprising hull, machined without retooling
- shielding as for the KW-90

Another development-related objective is to minimize acquisition and maintenance costs by using series-produced units such as the engine, automatic transmission, drive train, axles and steering mechanism. Based on the same logistics, Daimler-Benz was asked by the armaments sector to prepare design concepts for armored transport vehicles for which the term "other armored vehicles 90" (SGW 90) seems to have been adopted. A broad range of possible solutions to various transport problems arose, all of which provided far greater protection, larger axle payloads and better mobility than the Fuchs. It would thus be possible to form a logistically very favorable large family of medium- and heavy-weight transport vehicles, other armored vehicles 90 and wheeled KW-90's.

#### Deugra

Deugra in Ratingen produces fire protection systems, employs about 70 people and has sales of approximately DM 30 million. All German armored vehicles, like those of other nations as well, are equipped with halon fire extinguishing systems from Deugra which belongs to the British Graviner group. The Dutch Leopard 2's have Deugra engine compartment fire extinguishing systems, and the last Leopard 2's were also equipped with a fire suppression system for the crew compartment. As of the fifth lot, the German Leopard 2's will also be equipped with the fire suppression system, as will the Swiss Leopard 2's. Switzerland is also considering upgrading the combat-effectiveness of its No. 68 tanks with a fire suppression system, and in Austria the Kuerassier and M-60 have begun to be retrofitted with a fire extinguishing system.

Deugra is continuing to develop fire protection systems for the engine compartment and the crew compartment for the new generation of combat vehicles.

#### Diehl

The Remscheid branch of Diehl Gmbh & Co. of Nuremberg employs about 1000 people in five production halls in the company's track-producing sector. Diehl produces tracks for tanks, as well as other structures for a very broad range of armored vehicles within the country and abroad. The tracks are entirely metal and rubber parts; also produced are scroll gears, track rollers, support rollers, track aprons, rubber parts and rubberized metal parts.

Diehl also naturally develops these parts and the trend with regard to tracks is toward even greater wear resistance and lighter weight. Track development is largely an in-house effort.

# Eltro

The optronics firm of Eltro GmbH in Heidelberg belongs to AEG and in the field of optronics for land-based vehicles it is currently working on production of an in-house version of a  $\rm CO_2$ -laser distance meter for the Leopard 2 and for upgrading the combat effectiveness of the Leopard 1. Together with MBB and Philips, it is also developing the common-module-based thermal imager for the missile-equipped tank destroyer, Jaguar 1 (HOT). Night vision equipment for the third generation of medium and long-range antitank missiles is being developed within the Satel consortium (SAT, Thorn-EMI and Eltro).

# Flensburger Fahrzeugbau

Flensburger Fahrzeugbau-Gesellschaft mbH (FFG), which belongs to Harmstorf AG--but which does not find itself in financial "straits"--employs about 350 people to perform major repairs and conversion/upgrades on the Bundeswehr's track-laying vehicles. Beginning in 1963 it was initially wheeled vehicles that required repair (as of 1967 this became a separate company called "Fahrzeugwerke Nord"); then in 1965 track-laying vehicles were added at the Flensburger Schiffbau-Gesellschaft (FSG), while the military technology sector was renamed the FFG in 1980. Currently, major repairs are performed on the M-113 (also conversion to command communications vehicles), Marder (also upgrading combat effectiveness) and Leopard 1. In recent years the company has tried to offer vehicle modernization of such vehicles as the M-41, M-42, M-47 and M-48 to foreign armed forces. An M-41 has already been converted and tested using a Rolls-Royce diesel engine; together with Garrett and KHD an M-48 with a GT 601 gas turbine has also been demonstrated to the Bundeswehr.

## FWI

For more than 25 years Fahrzeuginstandsetzungswerk Ichendorf GmbH (FWI), 51 percent of which is owned by Krupp MaK and 49% by KUKA, has been involved in depot maintenance of armored Bundeswehr vehicles such as the Leopard IAl to A3, the armored recovery vehicle 2, the combat engineer vehicle 1, the Biber bridge-launching vehicle, the M-48 and the M-88 armored recovery vehicle. The complete vehicle is maintained, including such assemblies as the engine, transmission, hydraulic system and weapon system.

About 1000 people are involved in this work--the company's future outlook and that of other maintenance companies is not exactly good because depot main-tenance on the Leopard 2 is to be performed at the manufacturer's plant; in addition, wear will be noticeably reduced due to the increased use of training equipment.

#### FWM

Feinmechanische Werke Mainz GmbH, which belongs to AEG, develops and manufactures aiming and stabilizing systems, including training material, documentation, and electrical and hydraulic test labs, for armored vehicles (sales in 1986 were about DM 50 million with 340 employees in this branch). During the next three years the company should be working at 45 to 75 percent capacity in the area of army equipment—after that the outlook is not exactly positive.

Currently in production are the monoblock electronics and the newly developed gunner's grips for upgrading the combat effectiveness of the Leopard 1; they are also waiting for the sixth lot of the Leopard 2 (elevation power drive and fuel supply system among other things) and for a production contract for the MLRS azimuth gears. Negotiations are under way with BWB concerning a project designated SRK (new control concept) to replace certain mechanical/hydraulic components in the aiming and stabilizing system of the Leopard 1. Also with BWB, keeping in mind that in the future aiming and stabilizing systems will be equipped with electrical drives rather than hydraulic motors, a system is to

be developed in which an electric motor integrated into the turnet race ring is used in the lateral axis of battle tanks so that the azimuth gear is no longer needed (except for holding the turnet and manual drive in place). Naturally, in-house funds are also used for these kinds of developments.

GLS

The Gesellschaft fuer Logistischen Service GmbH (GLS) is a subsidiary of Krauss-Maffei which in the area of logistics and upgrading the combat effectiveness of armored vehicles, achieves sales of approximately DM 250 million (one third of which is exports) with a staff of about 120 employees. The company is deeply involved in supplying spare parts (initial and subsequent spare parts requirements) for Krauss-Maffei-produced vehicles such as the Leopard 1, Leopard 2 and Gepard for the Bundeswehr as well as for foreign customers. In addition, they also supply spare parts for M- and AMX-series tanks and for other armored vehicles.

GLS has the export distribution rights to the 6 x 6 Fuchs and in this area they work closely with the manufacturer, Thyssen-Henschel. GLS is heavily involved abroad in combat effectiveness upgrade programs for old vehicles. Together with Wegmann, 183 M-48's in Turkey were modernized. Both companies also offer a Super M-48 in Greece and other countries. In Thailand the M-41GTI (German tank improvement) was tested with regard to the requirements of Thailand's Armed Forces (there is talk of modernizing 100 vehicles initially). Improvements in the running gear on the M-41 are planned for Denmark. Together with Jung-Jungenthal, an M-47 is being converted to an armored recovery vehicle in Pakistan. In Turkey the combat effectiveness of the the M-44 howitzer was upgraded, and modernization of the M-52 self-propelled howitzer is also planned. The M-44 primarily involved the integration of an MTU diesel engine--the same is true for the improved AMX-30 which has already been tested in Saudi Arabia. In Saudi Arabia approximately 300 vehicles are to be converted and there is also interest in this kind of conversion on the part of Spain (together with Santa Barbara) in Venezuela, Greece and the United Arab Emirates where another approximately 700 vehicles are awaiting conversion. Improvements in the running gear were also made on an AMX-13-corresponding measures are being offered for AMX-13's in Venezuela, Ecuador, Singapore and Indonesia. Competing with companies from other nations, GLS is soliciting for combat effectiveness upgrades of the Soviet tanks in use in Egypt. T-54/55's and T-62's there were in part able to be refit with 105 mm guns, new MTU engines, gears, fire control systems and electrical turret drives.

#### Glueckauf

The machinery company of Glueckauf Beukenberg GmbH & Co. in Gelsenkirchen has also gained a foothold in the field of military technology with its line of hydraulics equipment. For the most part commercially available hydraulic products which have been adapted to special requirements are supplied for the turret gun drives of the Leopard l and M-109A3G self-propelled howitzer. In development (in-house financing) are hydraulic retrofitting sets for other armored vehicles—however the company is skeptical with regard to the future work load in the area of military technology.

# Hone ywell

In the area of equipment for armored vehicles, Honeywell Regelsysteme GmbH employs about 200 people in its sector for land-based control systems and trainers within the company's special technology group in Maintal. Emphasis there is on drive systems for turrets and guns, fire control and navigation (a ring laser gyro is in development), as well on trainers and computer applications.

In production are gyros and gyro packages for the Leopard 2, the Dutch Leopard 1 and the Leopard 1A5, electromechanical assemblies for the Leopard 2 and fire control systems for the Dutch Leopard 1. Together with Zeiss, Honeywell has developed a digital fire control system for upgrading the combat effectiveness of the Swiss tank 68; a fire control system and a ring-laser-gyro-based land navigation system, which can also be used in the self-propelled howitzer 70, is in development for the M-109 self-propelled howitzer. Electrical drives are in development or ready for production for the KW-90 family and for retrofitting tank turrets and for outfitting gun mounts (AIM-9L ground-launch equipment, etc.).

#### Industriewerke Saar

Industriewerke Saar GmbH (IWS) in Friesen, which is owned in equal shares by the Diehl group and Gerlach-Werken (a majority holding of the Krupp concern), was founded in 1963 as a civilian repair shop for major and emergency repairs, initially for the Bundeswehr's wheeled vehicles. Track-laying vehicles were added in 1965--at that time the HS-30. The company now employs somewhat over 1000 people and thus serves an important function in the Saarland region and the neighboring Rhineland-Palatinate in terms of providing jobs. Its program includes the M-113, Luchs, Marder, former gun-equipped tank destroyers which have in part been converted to vehicles for forward observers, and recently also the Bundeswehr's five-metric-ton cross-country truck.

# Jung-Jungenthal

Jung-Jungenthal GmbH, a now 101-year-old former locomotive factory located in Kirchen an der Sieg, in the mid-1970's withstood a very difficult crisis which caused a considerable reduction in the number of employees and forced the company to largely give up the locomotive business. Now, with about 600 employees and annual sales of about DM 75 million, the company is a private associated company in which Thyssen Industrie AG holds 15 percent of the capital investment. Development and production are focused almost entirely on military technology. In the area of locomotive construction, repairs are still performed and pneumatically driven mine locomotives are still being built.

When production of the hulls for the Fuchs 1 transport tank is completed, Jung-Jungenthal will still be busy with the production and repair of Leopard 1 parts (Jung was involved in the development of the Leopard 1!) and Leopard 2 parts such as gun shields, front and rear hull coverings, and parts for the running gears of vehicles to be supplied by MaK. The company also built the

hulls for the Wiesel prototype and naturally hopes later to build the approximately 350 series-produced hulls. The hull for the new 8 x 8 wheeled tank experimental rig was also recently built for Daimler-Benz (as were the prototypes and later the series-produced hulls for the 6 x 6 Fuchs and 8 x 8 Luchs); in addition, Jung-Jungenthal is building the hulls for the armored Mercedes cross-country vehicle out of special armor steel.

Jung, which was involved in the development and subsequent production of the Leopard 1 armored recovery vehicle and the combat engineer vehicle and was the supplier of all of the recovery equipment, wants to expand this branch of its operations in the future and not just act as a subcontractor (as it did, for example, with the hull work for converting 140 vehicles to the combat engineer vehicle 2). An in-house effort was to convert an M-47 to an armored recovery vehicle with the recovery equipment of the Leopard 1 and successfully test it. Together with GLS, a vehicle is also now undergoing conversion in Pakistan at Pakistan's expense--this could result in a contract for converting about 50 to 100 M-47's. The work would be performed by Pakistan Railways with support from Jung-Jungenthal. But other countries, too, are showing an interest in this kind of armored recovery vehicle, particularly Turkey and Spain. The Bundeswehr is also interested. In Trier it is currently testing an M-48 which was converted to an armored recovery vehicle by Jung-Jungenthal. The company is hoping that this effort will result in an order for perhaps 60 to 80 vehicles.

#### Krauss-Maffei

After a reordering of the participating relationships at Krauss-Maffei AG (via RTG, Diehl and MBB have obtained 25 percent of the capital), the company has finally found some peace. During the next few months it will probably also undergo organizational changes with the objective of creating several largely independent sectors. A Krauss-Maffei Wehrtechnik GmbH with about 1800 employees would then be founded for military technology.

This program is naturally of particular importance to this general contractor for series production of the Leopard 2. The fifth lot for the Bundeswehr will continue to be produced, at a reduced level, until mid-1987. Then will come 35 Leopards to be supplied by Krauss-Maffei to Switzerland. However, a sixmonth interruption before the first vehicles from the sixth lot of Leopard 2's can be delivered cannot be avoided. Then toward the end of the decade the first major repairs to the Leopard 2 will likely also be required. Since May of 1986 Krauss-Maffei has delivered 300 Skorpion mine launch vehicles (general contractor, Dynamit Nobel). Final assembly and testing of the entire system will take place at Krauss-Maffei itself, and the company is also producing the mine launcher units. This program will run until 1988.

By approximately that same date Krauss-Maffei, with a rate of delivery of five vehicles per month, will have performed the first major repairs on the Gepard. In competition with other firms Krauss-Maffei is also soliciting the combat effectiveness upgrade work planned for this wheeled armored vehicle.

The Leopard 1 is no longer in production, but there are nevertheless certain indications that additional vehicles will be procured by the user nations of

Denmark and Greece. A Leopard 1A3 converted to an A5 and on loan from the Bundeswehr was successfully tested in Thailand with tropicalized equipment and night vision equipment—150 new vehicles have now been offered for sale to this country. Naturally, Krauss-Maffei is also hoping to obtain the combat effectiveness upgrade work on the Leopard 1 with a view to converting them to antitank combat vehicles.

During the conceptual phase Krauss-Maffei will process all three KW-90 vehicles, primarily the antitank combat vehicle and the tank/helicopter destroyer vehicle--for this vehicle in particular Krauss-Maffei has already performed some preliminary work using its own and government funds (elevatable platform).

Krauss-Maffei has joined with Porsche and KUK $\Lambda$  for performing the final development work on the tank howitzer 70.

Recently the company has placed more emphasis on in-house initiative. These efforts include the modern--and thus probably too expensive--Wildcat antiair-craft defense system with two 30-mm Mausers; two prototypes have been built and tested (on an armored transport vehicle 1 and on a Piranha chassis). Whether its export to Saudi Arabia can be realized is questionable--but at least Krauss-Maffei has received permission to demonstrate the Wildcat there as it has already done previously in Belgium, Italy, Norway, etc.

An entirely new concept-using proven military and civilian assemblies-is being pursued by Krauss-Maffei in conjunction with Diehl with the ACV-Puma family which is discussed elsewhere in this issue. In this regard, the company is hoping to obtain the Bundeswehr as a customer in addition to obtaining export contracts (Turkey perhaps?).

Together with other German companies and under the leadership of its GLS subsidiary, combat effectiveness upgrades were performed on the vehicles of other vendors. In all cases Krauss-Maffei is responsible for the chassis (Super M-48, M-41 GTI, etc.). There is also a cooperative agreement with Vickers in Great Britain on the Vickers MK 7 battle tank. Krauss-Maffei is supplying the chassis assembly for this tank.

The training aids and peripheral equipment sector has also become an important branch of the company. Twenty Leopard 2 trainer tanks were supplied to the Dutch armed forces, 22 to the Bundeswehr; in conjunction with Thomson-CSF, 22 training simulators for the Leopard 2, M-109, Marder and Jaguar are to be supplied to the Bundeswehr.

# Krupp Atlas Elektronik

Krupp Atlas Elektronik (KAE) of Bremen, with its ever more widespread involvement in ultramodern and military-related electronics, is the contractor for the Leopard 2's EMES-15 fire control system. For this system using a common-module thermal imager (produced by Zeiss) and a laser (produced by Eltro), KAE, initially under contract to Switzerland, developed a digital fire control computer to replace the analog one. As of the fifth lot all Leopard 2's have

the digital system. Lots one through four are also to be appropriately retrofitted.

Largely equivalent to the EMES-15 is the EMES-18 fire control system which is to be used to upgrade the combat effectiveness of 1300 Leopard 1's--KAE is also the prime contractor for this work.

An in-house development for modernizing the M-series American battle tanks and the T-series Soviet tanks is the MOLF (modular optic lightweight fire control system) which is based on the EMES-15/18. Due to its modular design, various assemblies can be integrated, e.g. common-module- or Sprite-based thermal imager. The MOLF is now being tested in Greece in the Super M-48 by GLS/Wegmann.

KAE is proposing the optronic ORP panoramic periscope with day and night vision and  ${\rm CO}_2$ -laser distance meter for the planned combat effectiveness upgrade of the Gepard. A video/laser tracker can also be integrated if desired.

# Krupp Mak

Krupp Mak Maschinenbau GmbH in Kiel still employees about 3200 people of which approximately 1000 are involved in military technology. Its other business includes diesel engines for railroads and ships, and railroad-related technology. Also included in its military sector is the construction of submarine bow sections with torpedo firing tubes.

Still currently in production is the Leopard 2 (45 percent of all vehicles) --following an approximately six-month-long interruption the sixth lot is providing for continued production but at a much reduced rate (four vehicles per month). At the end of the 1980's major repair work should begin on the Leopard 2.

The company is completing the development phase of the combat engineer vehicle 2--three prototypes have been built and tested. In all, 36 combat engineer vehicle 1's used by the Bundeswehr and 104 armored recovery vehicle 2's are to be converted to combat engineer vehicle 2's.

For the armored recovery vehicle 3 on a Leopard 2 chassis, Krupp MaK has built a test rig which is to be tested at the test site in Trier in the fall. The Netherlands' share in the development of this vehicle is 15 percent.

As a developer, MaK has also built two prototypes for the LSM mine-clearing tank which have been in testing since the end of 1985.

The company also places great hope in production of the Wiesel. MaK is bidding on a Bundeswehr contract for 343 vehicles. It is also hoping for export contracts (Indonesia perhaps?); years ago it obtained the world-wide marketing rights from Porsche.

In the case of the KW-90, Krupp MaK is bidding on all three vehicles. Much preliminary work has already been done on these tanks, particularly the future

Leopard 3, such as the test rig with the VTS externally mounted gun (Marder chassis) or the heavy, front-wheel drive VTF test rig.

#### KUKA

KUKA Wehrtechnik GmbH in Augsburg was founded in 1898, has been involved in military technology since 1950 and has belonged to the IWKA concern since 1970. Since 1957 it has concentrated on development and production of turrets. KUKA currently has about 700 employees, 90 of whom are in development and design. Until about 1990 the production sector will be engaged in repairing and upgrading 1400 Marders to the A2 version with thermal imager and in major repair work on the M-113's of the 2nd Corps. The development program includes one- and two-man turrets for light- and medium-weight armored vehicles, and antiaircraft systems. The 30-mm Artemis mount, for example, was developed for Greece. In addition, KUKA is the prime contractor for developing the AIM-9L ground-launch equipment for the German Air Force.

KUKA turrets are used on various vehicles being tested and developed by NATO for disposing of explosive ordnances on airfields. Another development area at KUKA involves automatic loaders and ammunition handling systems for 120-mm main guns and 155-mm howitzers--in conjunction with Porsche and Krauss-Maffei this is KUKA's proposed new concept for the design of the self-propelled howitzer 70.

# MTU

Motoren- und Turbinen-Union Friedrichshafen GmbH (MTU) employees just under 6000 people and in 1985 achieved sales of DM 1.1 milliard (billion). It develops and produces diesel engines for ships, railroads, energy supply systems and heavy-duty vehicles, which also includes wheeled and track-laying armored vehicles.

Its biggest selling item, particularly in terms of quantity, is its 837 series of four-stroke diesel engines with 6, 8 and 10 cylinders and between 320 and 1030 kW of output. The most well known of these engines is the 610-kW MB 838 CaM-500 which drives the Leopard 1 battle tank and all other vehicles in the same family. The drives for the Swiss Pz 61 and 68 tanks are also part of the same series.

The next generation of higher output engines is the 8-, 10- and 12-cylinder 870 series with a power output between 735 and 1323 kW. The 12-cylinder MB 873 engine powers the Leopard 2, while the 8-cylinder version of the MP 871 is in the current self-propelled howitzer 70 and in the Korean XK-1 battle tank. Now in development and financed by the company is the very compactly designed 880 series with 6-, 8-, 10- and 12-cylinder V-type engines; 4-, 5- and 6-cylinder in-line engines are also possible, so nearly any size of wheeled and track-laying armored vehicle can be equipped with them. MTU hopes to have the opportunity also to use this engine in the KW-90 and other wheeled armored vehicles. The output per unit area of this series is 1100 kW/m³ as opposed to 800 kW/m³ for the 870 and 500 kW/m³ for the 837. MTU has concluded a licensing agreement with General Motors for this 880 series--both companies are aiming at future tank programs for the U.S. Army (advanced fighting vehicles) and

FM3 programs. MTU is also cooperating with General Electric in the development of an 1100 kW gas turbine for armored vehicles for the AIPS (Advanced Integrated Propulsion System) program financed by the U.S. Army. MTU is bringing its expertise in the design of battle tank drives into this agreement, and is also responsible for the development of the heat exchanger.

The ever increasing market for combat effectiveness upgrades of existing armored vehicles is naturally also very interesting for MTU. The 8-cylinder 837 engine, for example, can be found in Turkey in the M-48 upgraded by Wegmann; the same engine can also be used in other M-series vehicles. There are also proposals to equip the AMX-30 used in several countries with the 6-cylinder 833 engine which has an output of approximately 600 kW.

#### MWM

Motorenwerke Mannheim AG (MWM), which has belonged to the KHD concern since the spring of 1985, employees about 3300 people and has sales of about DM 500 million annually. Following reorganization of the engine production program by KHD and MWM, the company builds high-speed, water-cooled diesel engines under the MWM-Diesel trademark, as well as large and medium-sized KHD and MWM engines under the trademark Deutz MWM. With a version of the commercially available water-cooled D-234 diesel engine, MWM is now also attempting to enter the market for tank drive systems where special tank engines are currently the rule. Three prototypes of the Brazilian battle tank Engesa Osorio have been fitted with a 735 kW, 12-cylinder TBD-234--combined within the tank into a drive assembly with a LSG 3000 ZF transmission and a cooling system. A similar assembly with the same power output has been proposed for the AMX-30, however engines with six and eight cylinders would also be suitable for new, lighter armored vehicles or for converting older vehicles such as the M-113, for example.

MWM also provides power supply systems for the Roland--both the army version (Marder chassis) and the air force version (chassis for the 10-metric-ton truck, total weight).

# Philips

The systems and special technology sector of Philips GmbH in Bremen (formerly Elektro Spezial) in the area of military technology produces tank-driver night-vision equipment developed in-house--all Bundeswehr tanks are equipped with this Philips equipment--and repair equipment for night-vision and training/simulation devices for the Gepard and Roland antiaircraft defense systems. Digital DEA-24 data input/output devices for fire control tanks are also produced. Included in its development program--in part company-financed--are infrared sensors, the next generation of tank-driver night-vision systems and simulation systems.

### Porsche

This Stuttgart producer of sports cars, through its founder, Professor Ferdinand Porsche, had already established a tradition in the development of armored vehicles extending up to World War I. After 1955, the company was

also involved in the development of the Leopard 1 and many related vehicles such as the Biber, combat engineer and armored recovery vehicles. Porsche, among other companies, was also involved in advanced production engineering for the Leopard 2. The armored recovery vehicle 2 was also based on a Porsche design.

The military technology team in Stuttgart is preparing studies on future combat vehicles. The most important current project is the development of the Wiesel; four modified prototypes have now been supplied to the official agencies and the Bundeswehr for testing.

#### Renk

The Augsburg company, Zahnraederfabrik Renk AG, has developed eight different tank transmissions in the past 25 years and has produced a total of about 10,000 units. The Marder, Jaguar 1 and 2, TAM, the current self-propelled howitzer 70 and also the Leopard 2 have Renk transmissions. Currently in series production is the HSWL 354 automatic transmission for the Leopard 2 which covers the 900 to 1300 kW output range. Development projects involving Renk transmissions include the armored recovery vehicle 3 on a Leopard 2 chassis and the mine-clearing tank on an M-48 chassis. The RK-304 transmission (power output, 500 to 900 kW) can be found in the Italian Palmaria self-propelled howitzer, and can also be used to upgrade the combat effectiveness of battle tanks such as the M-47, M-48 and M-60 or Centurion. It is also found in the Super M-48 from Wegmann/GLS, for example. It is also suitable for use in the AMX-30, as are the HSWL 294 or HSWL 224 transmissions.

#### Rheinmetall

Rheinmetall GmbH of Duesseldorf employs about 3400 people in its military technology sector, including its Dutch subsidiary NWM de Kruithorn and Nico Pyrotechnik in Trittau; about 1500 of them are in Duesseldorf and 1000 are in Unterluess.

In terms of equipment production, most of the company's work still comes from the Leopard 2 program and involves final integration of 45 percent of all turrets. Rheinmetall supplies the 120-mm weapon systems for all Leopard 2's. With a view to upgrading the combat effectiveness of the Leopard 1, two Leopard 1's converted by Rheinmetall to use the 120-mm weapon system were introduced to the Leopard 1 user nations at the beginning of 1985. The 1300 Leopard 1's waiting to be upgraded are already designed such that the current 105-mm weapon system can be replaced by the 120-mm system.

Rheinmetall is producing the accompanying multi-purpose and KE ammunition for this 120-mm gun; new versions of the KE with increased penetrating power are also in development. Other types of ammunition for bringing down helicopters, for example, are also possible with this gun--see also Rheinmetall's own report elsewhere in this issue.

For the new armored combat vehicle or for upgrading the combat effectiveness of the Marder, Rheinmetall is offering the Rh-503 machine-cannon (drive is supplied by another vendor). A special characteristic of this 35-mm gun is that the barrel can be exchanged if desired and made to fire 50-mm cartridges.

Together with Wegmann and Krupp MaK, OTO Melara and Royal Ordnance of Nottingham, Rheinmetall is bidding on the final development work for the self-propelled howitzer 70. The 155-mm weapon system for this self-propelled howitzer is a Rheinmetall product.

In development is the 105 SLR main gun with reduced recoil and increased backward travel for lighter-weight vehicles up to 11 metric tons.

#### Teldix

At Teldix GmbH in Heidelberg, which belongs to the Bosch group, the emphasis in the land-based military technology sector (approximately 30 percent of overall sales) is on vehicle navigation and orientation systems which, due to their modular construction, can be combined to produce various systems. These systems, which were developed with in-house funds, are used in the ABC, detection, radar and EloKa versions of the Fuchs 1 transport tank, in the wheeled Roland and in the Roland antiaircraft command post, as well as in TUER and LUER radar equipment for the army's antiaircraft troops. Also used in the Fuchs is recording cartography equipment (directional recorder) which shows the location of the vehicle either as a coordinate on a numerical indicator or using crosshairs on a map. Also new in the program is the ZOG target locating equipment for artillery surveys; this equipment has a north-seeking gyro, aiming circle meter and laser distance meter.

A large portion of the company's product line is also exported. With regard to the new generation of combat vehicles, Teldix is engaged in designing navigational equipment.

## Thyssen-Henschel

Thyssen-Henschel in Kassel, which includes Waggon-Union (Siegen/Berlin) and Thyssen-Getriebe- und Kupplungswerke, is one of the nine divisions of Thyssen Industrie AG in Essen. It is active primarily in the areas of transportation technology (locomotives, magnetic drive technology) and military technology-light and medium-weight armored vehicles. The Marder was developed and built in Kassel, and the Luchs armored reconnaissance vehicle, the Fuchs 1 transport tank, the Jaguar 1 and 2 missile-equipped tank destroyers and the Roland antiaircraft-missile-equipped tank were also produced there. The company is currently busily engaged in the M-113 conversion program. Following shipment of 320 M-113 AlG armored reconnaissance vehicles, 154 M-113 AlG fire control tanks will be outfitted and 220 M-577AlG command post vehicles will be converted. In addition, where is repair work to be performed on the M-113's-even with all this work, however, only 60 percent of the production capacity available for military technology is being used. Just beginning is the final assembly of all 342 MLRS launch vehicles for the various European armed forces, with the hulls being supplied by Giat.

As the developer of the Marder, Thyssen-Henschel naturally has high hopes with regard to upgrading the combat effectiveness of the Marder with improved shielding on the hull and turret. The company is also involved in the conceptual phase of the KW-90 with an emphasis on the Marder 2 and the tank/helicopter destroyer vehicle. Regarding the self-propelled howitzer 70, Thyssen-Henschel has submitted a bid, together with the British firm VSEL, based on the AS-90 turret and the self-propelled howitzer 155 chassis.

The company's activities in terms of its and developments and those for outside sources are also rather far ranging metric-ton battle tank based on the Marder has been developed. This battle tank was equipped with the 105-mm gun from Rheinmetall, built as a prototype and is being successfully tested in Thailand and elsewhere. Other nations are also showing an interest in this tank.

Another in-house development is the 4 x 4 Condor wheeled tank, over 400 of which have been supplied to Malaysia. A very new design in terms of the running gear is the TH-400, 6 x 6 test rig with a chassis weight of approximately 17 metric tons. It has independent wheel suspension with suspension arms and torsion bar suspension. Because of the design and the large tires, the wheel load may be over four metric tons and thus the entire vehicle weight may be more than 25 metric tons.

# Thyssen-Maschinenbau Schutztechnik

The Witten-Annen plant of Thyssen-Maschinenbau GmbH employs about 600 to 700 people in the military technology and "internal security" sector. Fifty percent of all Leopard 2 turret housings from what is currently the Bundeswehr's last existing order are being produced--previously all Marder and Roland hull shells, as well as the Leopard 1 and Gepard turret shells were produced. An in-house development is the special TM-170 vehicle with shielding; approximately 300 of these vehicles will be in production until 1990 for the Federal Border Guard. The company also hopes to be able to export these vehicles intended for internal security and its simplified export version the TM-170 Hardliner; they see the oppor tunity in the Near East, India and Africa. The British Armed Forces also wanted to buy this vehicle for use in Berlin (48 vehicles)--it had already been tested and the agreement was nearly ready to be signed when the Berlin Senate had "political second thoughts." Since the equipment of the British Armed Forces in Berlin must be paid for by the FRG (occupation fees), the entire project was put on hold for the moment.

The Witten-Annen plant also supplies precut armor plates for armored vehicles to NATO members.

#### Wegmann

Wegmann & Co. GmbH in Kassel has been involved in military technology for about 60 years (primarily turnet production for the Leopard 1, Gepard and Leopard 2), and today the 60 percent of its sales which come from this business accounts for approximately DM 1.5 milliard (billion). Of the company's approximately 4500 employees, 40 percent are involved in military technology. Turnet production for the Leopard 2 (55 percent of all turnets) is currently at the forefront. In the meantime, training equipment has also become a future-oriented source of business within the company.

Under general contractor MLRS/EPG, Wegmann was responsible for final integration of all 200 MLRS systems for the Bundeswehr--its French partner (and the prime contractor for final integration) is Aerospatiale. As of 1988 Wegmann will supply four vehicles per month, and the company will also build the cages for the missile containers. As of 1987, the 1300 upgraded Leopard

lA5's should be ready for delivery--Wegmann is the general contractor for this combat effectiveness upgrade program. All of this work, however, will not fully utilize the company's production capacity.

Together with Rheinmetall--within the joint subsidiary Rheinmetall-Wegmann GmbH (RWG)--Krupp Mak, OTC Melara and Royal Ordnance Nottingham, Wegmann is bidding on the final development work on the self-propelled howitzer 70; in series production the company would be called upon for turret integration and component manufacture. In the case of the KW-90 Wegmann wants to work with all four system suppliers on the turret design.

A few years ago Wegmann was the general contractor for modernizing 183 M-48's in Turkey. Together with GLS the company has now upgraded an M-48 to a Super M-48, more or less to provide an example of how an M-48 can be thoroughly modernized.

# Zahnradfabrik Friedrichshafen

Zahnradfabrik Friedrichshafen AG (ZF) probably has the largest line of transmissions available for wheeled and track-laying armored vehicles. The 4 HP 250 shifting and steering gear for the Leopard 1 is from ZF, and the Fuchs and Luchs also use ZF transmissions. The P 25,000 final drive on the Leopard 2 is also from ZF.

Today, there are transmissions based in part on commercially available models but used in military vehicles from low output classes (under 100 kW) up to the outputs required by heavy-duty modern tanks. The HP 22 transmissions are found in some of the small airdroppable tanks of the French company Lohr, and also in the Wiesel. The HP 600 is in Krauss-Maffei's ACV Puma. Integrated shifting and steering gears are modular-based power-shift transmissions of the LSG family. The LSG 1500/2000 is designed for medium-sized track-laying vehicles; the LSG 2000, for example, is in the British-Brazilian AS-90 self-propelled howitzer (due to its construction it is especially suitable for front-wheel drive vehicles), while the LSG 3000 with integrated retarder is in the Brazilian Osorio battle tank, the French AMX-40 and the Korean XK-1 among others. These transmissions are naturally also suitable for vehicles intended for combat effectiveness upgrades.

#### Zeiss

The Carl Zeiss company in Oberkochen, also renowned in the field of military technology for its submarine periscopes, developed and produced the EMES-12A3 fire control systems for the Leopard 1 for Greece, Turkey and the Netherlands. Zeiss also developed and produced the common-module based thermal imagers (which have since been further refined) for the Leopard 2 battle tank, the upgraded Leopard 1A5, the Marder 1A2 and the Luchs armored reconnaissance vehicle. The Leopard 2 also has the PERI R17 command panoramic periscope from Zeiss. Together with Siemens, work is also progressing under contract to the Ministry of Defense on a CO<sub>2</sub>-laser distance meter. The Optical Beamrider proposed by Zeiss was selected for third-generation medium-range antitank missiles; it is to be developed in conjunction with TRT and GEC Avionics.

12552

CSO: 3620/812

MILITARY

# NEW MILITARY COMMANDER IN NORTH SEEN AS 'HARDLINER'

Lisbon O JORNAL in Portuguese 14 Aug 86 p 4

[Text] In December 1983, the weekly EXPRESSO wrote that "His temperament might advise him against leading the army but not against commanding the GNR [Republican National Guard] or the PSP [Public Security Police]." Just 2-1/2 years later, Gen Carlos de Azeredo is not leading the army but neither is he commanding the GNR or the PSP; instead he has been CG of the Northern Military Region since the day before yesterday (Tuesday).

Replacing Gen Goncalves Passos, who has been picked for the job of director of the Higher Institute of Miliatry Studies, Gen Carlos Azeredo, during the RMN [Northern Military Region] command transfer ceremony, delivered a speech in which he said that the young people constitute the main concern of his command, "the great challenge facing the cadres of this region."

Gen Goncalves Passos in turn used this opportunity for a brief review of the activities he carried out during the 2 years he commanded the RMN. In mentioning Gen Carlos Azeredo, he said that he is a "military leader with a strong temperament, straight-forward in his attitudes, professionally particularly well-equipped for his job, a man who has been recognized for his qualities as a military leader and as an individual more than once."

Gen Goncalves Passos described this event as "proof of the close bonds existing within the Northern Military Region between the civilian, religious, academic, and military authorities" and the news published confirm these words; he pointed out that "numerous civilian, military, and church personalities" were present.

The audience in particular included Marshal Antonio de Spinola with whom Gen Carlos de Azeredo--a devoted and admitted Spinola-follower--has been linked by bonds of friendship for a long time.

Chief of Cavalry since 1984, Gen Carlos Azeredo (Carlos Manuel de Azeredo Pinto Melo e Leme, which is his full name) undoubtedly is one of the most controversial leaders connected with 25 April. Considered to be against Salazar (and against Marcelino) in the old regime, he is today pointed up as a Rightist; in 1976, however, he considered himself to be a democrat and not even an anticommunist. "Being anti in politics is a negative position," he said at

that time (DIARIO POPULAR, 8 July 1976). "We must be something positive and we must not be anti because that is always a negative position."

Having served as captain in India and Angola (Cabinda) and as major in Guinea, Carlos Azeredo even before 25 April came out against the way in which the war was being fought and that earned him a severe disciplinary reprimand. At that point he even applied to resign from the army but agreed to go to Guinea with General Spinola.

He participated in the events of 25 April in Porto; at that time he was a lieutenant-colonel and he was in charge of military operations against the installations of the PIDE [International and State Defense Police] in that city; but his behavior during the long process that followed was frequently criticized severely by his fellow officers.

Soon after 25 April, he was promoted to brigadier to take over as military governor and commander-in-chief on Madeira as well as governor of the autonomous district and president of the governing board. He was an advisor to Francisco Sa Carneiro when the latter was prime minister; he was a professor at the Institute of Higher Military Studies; he was second-in-command of the Northern Military Region; inspector of Cavalry; and assistant inspector-general of the army; these are some of the other entries that stand out in his biography. We might also add that he was invested with the Order of Malta in June 1985 according to a news item published at that time in the weekly TAL E QUAL.

In political terms, we recall his support for the candidacy of Gen Soares Carneiro to whom he tried unsuccessfully to attract Marshal Spinola, according to news published at that time. Before that however Gen Carlos Azeredo had adopted political positions which involved bitter debates and which gave rise to law suits and disciplinary punishment.

In March 1977, he addressed to the then Maj Melo Antunes a letter in which he criticized him in violent terms which in a general way were considered insulting because of statements which the latter had made to a Spanish Christian-Democratic-inspired magazine, CUADERNOS PARA EL DIALOGO.

The latter, in which he described Melo Antunes as "so-so Mr Major and pitiable citizen Antunes," earned Carlos Azeredo a vote of congratulation from the Madeira Regional Assembly through the initiative of Alberto Joao Jardim.

Several months later, in July, Melo Antunes again was a target for Carlos Azeredo in the course of a trial during which Vera Lagoa, the lady managing editor of O DIABO, was the female defendant. The words which he expressed at that time were also considered insulting and earned him an order for investigation; but Carlos Azeredo in the end was cleared of charges of "any infractions" in the law suit which Melo Antunes had filed against him.

In 1982, a letter which he wrote to the then Chief of the Army General Staff Garcia dos Santos earned him a disciplinary trial which ended with a sentence of 10 days in prison. The appeal he filed with the Supreme Military Tribunal was turned down.

5058

CSO: 3542/148

MILITARY

PARLIAMENTARY COMMISSIONER: COUNTRY ILL-PREPARED FOR SPETSNAZ

Stockholm DAGENS NYHETER in Swedish 22 Aug 86 p 2

[Editorial: "Our Poor Preparedness"]

[Text] There is obviously room for criticism. Swedish authorities and important key figures had trouble absorbing the shocking information about the assassination of Olof Palme. In several instances there was preparedness for handling the situation; in some cases it took remarkably long time for the information to penetrate.

This comprehensive judgment is now made by Per-Erik Nilsson, parliamentary commissioner for the Judiciary and the Civil Service, and chairman for the Civil Servant Commission that is investigating a number of factors surrounding the death of the prime minister. In an interview with the DAGENS NYHETER, he stresses that the opinions are personal. But it can still be assumed that he is counting on the criticism being a central feature of the coming final report from the Commission and that he has the support of his colleagues; otherwise the statement would appear somewhat careless.

The Commissioner's opinions have caused newspapers to call Sweden an "operetta country" and to accuse persons concerned of sloppiness, naivete and lack of dedication. Overall the comments seem based on the Commissioner's opinion that those who were alerted during the night, should have figured that the deed was not an insane act but perhaps "a Spetsnaz attack or a well-organized terror action against several members of the Swedish government."

In all fairness, it should not be surprising that officials showed a lack of readiness in such an extreme situation. Since the breakthrough of democracy, no head of state had been assassinated in any European democracy before the deed on Sveavagen. The thought really did not present itself immediately that the entire Swedish government might be threatened or that the country, given the current international situation, could be the object of a surprise attack from abroad. Efforts to make realistic assessments of increased Swedish needs for preparedness usually have other foundations.

Besides, no one probably wants to live where the government officials constantly fear the worst; consequently the guard of the open society with all its faults.

WE do not have people on duty at our hospitals, in communications, at the police stations or the Ministry of Foreign Affairs, nor duty-officers at military installations because of threatening dangers. We have them for reasons of general security. That is why there is reason to learn from what happened—and to improve what indisputably needs to be improved—without exaggeration after the event.

12339 CSO: 3650/300 MILITARY

SUBMARINE NET USED IN SEARCH FOR SUSPECTED INTRUDER

Stockholm DAGENS NYHETER in Swedish 22 Aug 86 p 6

[Article: "Submarine Nets Used At Hudiksvall"]

[Text] The search for foreign underwater activity in the Hudiksvall bay was triggered by the fact that two civilians saw a suspicious foreign object in the water a couple of days ago. The two observations were made independently of each other, which caused the military to heighten its readiness. The Coast Guard has place a submarine net between Saltvik and Gackeron and certain other technical devices which are able to give indications of foreign underwater activity.

"We have not had any indications at all," says Jan Tuninger of the Defense Staff.

It is said at the Defense Staff that the placement of submarine nets in the area is a result of the Navy's lack of resources along the Norrland coast. There is one patrol boat from KA5 (Coastal Artillery) in Harnosand in the area.

No actual weapons such as anti-submarine shells or depth charges have been used in the area.

12339 CSO: 3650/300 MILITARY

# BRIEFS

NORWAY BUYS TRAINER AIRCRAFT--The Norwegian Air Force has ordered four SAAB Safaris from SAAB for delivery in the summer of 1987. SAAB has previously sold 18 SAAB Safaris to Norway. The Danish Air Force has also bought the aircraft, which is a single-engine, propeller-driven plane used for training fligts. [Text] [Stockholm DAGENS NYHETER in Swedish 22 Aug 86 p 13] 12339

CSO: 3650 300

ECONOMIC

VERHOFSTADT'S ROLE, VIEWS ON BUDGETARY DISCIPLINE

Role of Verhofstadt

Brussels LE SOIR in French 30 Jul 86 pp 1, 3

[Article by Guy Depas: "Verhofstadt: "Like Pfaff, I Keep the Budgetary Goal"]

[Text] Is their trade-union wing mistreating the Christian parties? Too bad: Guy Verhofstadt will no longer let go of a single idea or a single franc.

He told us in an exclusive interview that sparing the cohabiting unemployed was as out of the question as sparing the state school. To those who would eventually like to soften social austerity by shifting a share of the budgetary effort to the bankers through the conversion of the public debt, he answers that Val Duchesse is an economically and politically balanced whole.

The PVV vice-prime minister thinks that economic transfers are certainly possible within a same sector. Moreover, the endless discussions on education proved that point. On the other hand, the plan would collapse if other shifts were to occur. In short, he indicates, each piece must remain in its place in a card house otherwise the whole structure collapses.

As soon as he assumes his budgetary responsibility, Guy Verhofstadt ceases to be a man. He becomes a calculator. Now, can a machine compromise?

This question will get answered in the forthcoming days. Theoretically, today, the Council of Ministers must still ratify the agreement on national education concluded last weekend. Charles Ferdinand Nothomb, the PSC [Christian Social Party] vice-prime minister, seems to think that it is a simple formality. In an interview published elsewhere he expressed the opinion that the solution extracted "with forceps" was a good solution. It is true that, the free system having been given a better role than the official one, a social Christian minister would be wrong to complain, even if he is French-speaking and if, indirectly, Flanders is doing all the work for someone else's benefit.

Will Charles Ferdinand Nothomb still be as satisfied if Verhofstadt's recommendations on the implementation of the unemployment reform undertaken in Val Duchesse, despite the CSC [Confederation of Christian Trade Union] protests, were followed? Maybe. But his colleague, Philippe Maystadt, whose so called "left" sensibilities are more obvious, could disagree. Is there a struggle among leaders and trends in the PSC?

It is said that it is the vulnerable spot of the government and it could still cause a few psychodramas between now and the conclusion of the governmental work. Especially because, this time, the community aspects, which, on the education issue, concealed ideological differences, will no longer serve as a screen. This applies to unemployment as well as to the public debt conversion the ways and means of which must be drawn.

Let us recall that Philippe Maystadt has already given a very clear cut opinion on that latter issue: Debt funding must bring in 30 billions. And this 30 billions must be in the form of savings and not in deferred due dates.

Guy Verhofstadt agrees on the substance, as may be gathered from the interview below. He is, however, more subtle on the form: He says that since no coercive measures can be imposed without affecting state credibility, second-degree savings must be considered. According to the minister of budget, debt funding must not cost the bankers anything; but, by freeing the state from an obligation to pay immediately, it only allows floating lower interest rate loans in the future. It is therefore in this manner that the 30 billions in deferred due dates will, in the long run, become savings.

Agree, disagree? Is Martens VI still in danger? As for the minister of budget, he sees no serious skirmishes in these sectors. Is he guilty of optimism? In order to calm any misgivings on the fate of the government, he offers two arguments.

The first is the opposite of the somewhat Machiavellian strategy attributed to Martens himself, which consists in keeping his associates within bounds through unpopularity and the fear of elections. On the contrary, says Verhoistadt, everyone is aware that economic circumstances will never be as favorable for implementing financial reorganization and no one will want to miss the train. This is what is really holding the coalition together!

The second is more plausible: He says that after Val Duchesse, the government's task, for the remainder of the year, will be to deal tactfully with conditions for a revitalization of the workers through improved wages compatible with the competitiveness of the enterprises. And this cannot leave the democrats-Christians indifferent. In short, the carrot at the end of the stick. To be sure, besides the trade-unionist grumbling, which does not scare the minister of budget, the typically political and community issues remain for the fall term. What about Happart? He admits that he is dangerous: "We shall see in September; one problem at a time."

Verhofstadt on Budget

Brussels LE SOIR in French 30 Jul 86 p 3

[Beatrice Delvaux, Guy Depas and Guy Duplat interview Vice-Prime Minister Verhofstadt]

[Text] [Question] You have been at sixes and sevens about education, examined the issue on all sides and yet?

[Answer] Our work is taking a normal amount of time, for it is the first time in Belgium that a budgetary reorganization plan is being undertaken bearing only on expenditures; and we want it fully itemized.

[Question] But you are embellishing the situation. For example, did not the government muddled through the figures?

[Answer] No! The figures agreed upon in Val Duchesse were the right ones. Only, some people wanted to make exceptions...

[Quesion] ... upon the PSC's request?

[Answer] Exceptions were made for education in the general measures pertaining to savings for understandable and logical reasons. But, consequently, it was necessary to compensate the smaller savings.

[Question] And in the final analysis, are not private schools faring better than public ones?

[Answer] No! Everybody is on the same footing. For example, when we decide to align budgetary standards with organic ones, we apply the same rules to all the systems. If this affects the official system more, it is due to the state teachers' status which we will have to correct. In so doing, we are not in the least challenging the specific impact of state education which is guaranteed by the organic standard and by budgetary divergences.

Conform To Community Characteristics

[Question] Are there also community balances to find?

[Answer] No! That was not the goal even if it led to community balances.

[Question] Would it not be simpler to make education conform to community characteristics?

[Answer] It would be simpler. It is a logical middle-term objective.

[Question] You seem to be the diehard defender of the agreed figures...

[Answer] I am asking the total implementation of the Val Duchesse plan in every sector. For I know very well that, if I agree to change some of the figures, half of the planned savings will be gone after barely a few weeks. It is also true for unemployment. The same again for the debt, etc.

[Question] Are you the "goalie" of the governmental team, who protects the Belgium goal?

[Answer] (Laughter) Yes! If I were not so uncompromising, people would say about me: Oh, how nice he is, how pragmatic. And then, at the end of the year, I would be called a bad minister! I would be accused of not having respected the budget goals. Some socialists call me a doctrinarian. They hint that I would like to do harm. It is hogwash.

[Question] But, can't an agreement like that of Val Duchesse be improved? Could there have been mistakes?

[Answer] Moesen, a professor at the University of Antwerp, (he is not a liberal), studied the possible and desirable distribution of the budget savings to be made. The results speak for themselves: They concur with what we did in Val Duchesse. He concluded his study by stating ironically that, to be sure, the government did not have a study like his on hand, but Martens did what he was supposed to do.

#### Consolidate

[Question] Is the government tackling a few more thorny issues?

[Answer] I do not believe that we will have too many difficulties. In the wake of the social negotiations, the savings to be made in the social security sector are clear.

[Question] Including the one on the cohabiting unemployed? A small saving in the face of the risks of the CSC, and even PSC, reaction?

[Answer] To my knowledge, the PSC ministers did not express the desire to reopen the discussions on some of the measures. For me, there are no small billion or million. Everything is important and must be implemented or compensated by other savings.

[Question] And the public debt? The state wants to economize 30 billions in interest through a "conform-to-the-market" mechanism. What does it mean?

[Answer] Any statement about the debt is premature. I will simply say that it is necessary to banish coercive methods. Otherwise, we will move toward a capital flight, a loss of credibility and a 1 to 2 percent increase in interest rates. We must anticipate the expected drop in interest rates.

[Question] But there are no miracles. If it is a real saving for the state, someone else has to pay. Or is it simply postponing interest costs to later?

[Answer] (Vague and nebulous)

[Question] Is it really moral or equitable to protect the banking market and capital income to such an extent, whereas you were less cautious with other professional categories?

[Answer] (None)

[Question] Could we make over 30 billions on the public debt and thus save on other unpopular measures?

[Answer] Let us begin by implementing our decisions. The balances of our plan are not free. I told you that Professor Moesen finds them good. Our plan, with its balances, is not free. It will enable us to get out of our difficulties.

If we implement it, it will be a first substantial step toward breaking the vicious circle of the public debt.

[Question] A first step... Will there be others?

[Answer] It is clear that if we fully implement the budgetary plan, we can make a go of it—as shown by the simulations of the commissariat to the plan. On the other hand, it is also clear that if we do not implement the plan, an even stricter one will have to be drawn, with the aggravating result that no one will believe us again. There will no longer be popular support to authorize another Val Duchesse. The political class is playing today its last budgetary card.

# Revitalization

[Question] In addition to the budgetary austerity, should not wages be eased?

[Answer] I hope that an interprofessional agreement will make it possible both to safeguard the competitiveness of the enterprises and somewhat increase the wages through a work dividend system, like the Leysen one at Gevaert. Where it is possible to do so, cadres must be revitalized.

[Question] Are there no longer general rules?

[Answer] That is right. We must no longer speak of "the" competitiveness, no longer call upon "the" salary and "the" working conditions. There are today "many" competitivenesses, "many" salaries and "many" working conditions. This must be analyzed sector by sector, enterprise by enterprise.

[Question] Let us get back to you. Are you a happy minister?

[Answer] (Pause for thought) I like what I do...

[Question] And you like all your colleagues?

[Answer] (Laughter) Sure, even if, from time to time, one of them is more annoying. I have an interesting post. I can control everything. However, my duties are also difficult. It is necessary to fight all the time.

[Question] Did you expect something else?

[Answer] No! My challenge was that, having spoken for 4 years about the public debt abyss, the time had come to go into action with everyone looking. But I have Marten's firm support. Nothing would be possible without that and without him. You remember the sad fate of previous reorganization plans.

# Reshuffle?

[Question] But are the discussions difficult?

[Answer] To be sure. We discuss. It is difficult. But all of that is normal, for we want to implement what we have decided.

[Question] The government seems tired. Has it not reached the end of its rope?

[Answer] (Smile) Vacation time is drawing near. No, let us be serious. I believe the government remains impelled to implement its plan, for everybody is aware that, for the first time in 10 years, and thanks to the conditions of the international economic context, we can solve the serious problem of our public finances, and heal our situation as Europe's invalid with the highest interest rates and the largest deficits. To be sure, we will meet many more problems: Community and pressure groups, Happart... But we can solve them if we all remain aware of this historical possibility of solving the problem of our finances. The greater part of the majority knows it. It does not want to miss such an opportunity. There lies the cement of the coalition.

[Question] Will a ministerial reshuffle be needed?

[Answer] It is the prime minister who must decide whether or not the time is right for such a move.

[Question] And if Happart were dismissed by the Council of State in September?

[Answer] We will see in September. We must respect the decrees of the Council of State.

[Question] It is a mighty big question mark.

[Answer] It has been a question mark for 5 years.

[Question] There is also the dossier on the mines and the RTT [Telegraph and Telephone Administration]?

[Answer] It is true that the community issue will be reopened in September and that some people are sometimes tempted to brandish it for lack of having worthy arguments in the economic dossier.

6857

CSO: 3619/60

ECONOMIC

LEADING EXPORTING SECTORS OF ECONOMY ENUMERATED

Paris LES ECHOS in French 18 Aug 86 p 2

[Article by C. C.]

[Text] Viewed in the same way as the half-empty bottle, French foreign trade is not exactly blossoming. Its foreign deficit persists, its market shares are dwindling and its industrial trade surplus is declining.

But if one views it as a bottle half full, the gloom is soon dispelled. Is France not the fifth-ranking exporter in the world? What is more, it would easily take fourth place away from Great Britain if the latter did not export its black gold. Furthermore, has it not taken giant strides in 25 years, increasing its export effort by 12.8 percent and its GNP by 24? Finally, France can pride itself on a number of its export sectors.

A study completed by those close to the CNPF [National Council of French Employers] has singled out some 20 high-performance sectors among the top in the world, along with some 1,000 enterprises leading the way on the world market.

Among the sectors earning the most foreign exchange are, the study finds:

Agro-food: With 11 percent of the world market, France is in second place among exporters, after the United States. Furthermore, this sector achieves the top surplus in our trade balance, with + 34.2 billion francs in 1985. But if French agro-food churns out so much foreign exchange, it is too frequently thanks to unfinished products and not enough thanks to the stagnant processing industries.

The main export subsectors are wines and spirits, grain, meat, chocolate, canned goods and dairy products. However, a threat looms on the horizon to these industries, which devote but .3 percent of their turnover to research, compared with 2.3 percent for French industry as a whole.

In addition, this sector is characterized by an extreme scattering of enterprises: a total of 4,000. This scattering stands in the way of an adequate investment effort aimed at competing with international giants in the profession that are waging the offensive in research, innovation and concentration. Aeronautics and space industry: Here also, France occupies second place among world exporters. With 70 percent of its production exported, the sector managed a surplus of 14 billion francs last year. The second-ranking producer of aircraft in the world, France is also the second exporter of civilian helicopters.

Arms: Out of the \$90 billion in world arms sales, France is in third place (11.5 percent of the market), behind the United States (36 percent) and the USSR (30 percent). Some 40 percent of all French arms production is exported, representing 5 percent of all of our exports and 17 percent of our overall equipment sales. This sector showed a surplus of 30.5 billion francs last year.

Automobiles: French autobuilders, with 58.5 percent of their production sold abroad, last year retained their third place in the world, after the Federal Republic of Germany and Japan. The balance of trade is positive with a surplus of 13 billion, to which one must add the 17.9 billion taken in for spare parts.

Mechanical equipment: With 102 billion francs in products exported, or 42 percent of the sector's turnover, mechanical equipment in 1985 contributed a surplus of 14 billion francs to our trade balance. Countries of the OECD absorbed 57 percent of our exports and sales to Africa are declining. Although the machine-tool sector cannot claim to be an export leader, it is clearly on the rise. Its export results rose 63 percent in 1984.

Electrical and electronic equipment: These industries combined achieve 45 percent of their turnover from exports. Foreign trade showed a surplus of 9.4 billion in 1985. The balance of this sector could be much better if it were not burdened by the deficit (-1.4 billion in 1985) of the electronics group, which presents highly varied results depending on the product. While professional equipment is outstanding, as in the case of passive component parts, consumer electronics leave much to be desired, with a rate of cover of only 36 percent.

Chemistry, parachemistry and pharmacy: France is the fourth-ranking exporter in the world, with 117.7 billion francs, after the Federal Republic of Germany (230 billion), the United States (160 billion) and the Netherlands (125 billion). The essential portion of the profit balance (23 billion francs) is obtained from cosmetics (+ 10 billion), pharmacy (+ 8.6 billion) and plastics (+ 2.8 billion).

The fact remains that the structural evolution of the profession is still a matter of concern. French chemistry achieves most of its results with the Third World (20 percent), while its trade declined last year with the EEC (- 3 percent) and the United States (- 2 percent).

Tourism: In 1985, it brought in nearly as much as agro-food (31.5 billion francs). It occupies 12 percent of the international market and obtains most of its receipts from EEC countries (33 percent) and the United States (31 percent).

11,464

CSO: 3519/243

ECONOMIC

# LATEST INFLATION FIGURES ANALYZED BY PRODUCT

Paris LES ECHOS in French 26 Aug 86 p 2

[Text] According to INSEE [National Institute of Statistics and Economic Studies] figures, the price index rose .1 percent in July (the previous estimate was between .1 and .2 percent). This is a particularly encouraging sign for the government inasmuch as the process of unfreezing prices requires a period of calm. Naturally, what one has is more a drop in imported inflation than any control of internal factors of inflation.

Consumer Prices July 1986 (Base 100, 1980)

	Variation in	Prices (in percent)
Category	Past 12 Mos.	Past 6 Mos. Past 3 Mos. July
Overal1	+ 2	+ 1.1 + 0.7 + 0.1
Food (including beverages)	+ 2.4	+ 1.2 + 0.7 + 0.4
Manufactured products	+ 0.2	+ 0.1 + 0.4 - 0.3
Incl. Clothing & textiles	+ 6.5	+ 2.5 + 1 + 0.2
Other manufac. prod.	·- 1.3	- 0.5 + 0.3 - 0.4
Services	+ 4.3	+ 2.6 + 1.1 + 0.5
Manu. prod. private sector	+ 4.8	+ 2.5 + 1.1 + 0.4
Services private sector	+ 4.6	+ 2.8 + 1.4 + 0.5
Public rates, energy	- 9.3	- 5.2 - 1.1 - 2.1
Rent, water distributed	+ 5.2	+ 2.5 + 0.8 + 0.7
Health services	+ 2.1	+ 1.7 0-0 0.0
Public rates	+ 0.6	+ 1.1 + 0.8 - 0.4
Oil products	- 22.1	- 13.7 - 3.8 - 4.7
Energy	- 15	- 9.2 - 3.1 - 3.1

In July, food nevertheless contributed greatly to the rise in the index. With .4 percent, that column registered the increase of a whole series of items (fresh pork, ham, dairy products, fresh fruits and vegetables). In the months ahead, the drought and climatic difficulties would continue the upward pressure on a number of food products.

In contrast, manufactured products pull the index downward with a -.3 percent. This figure is essentially due to public rates, a warning signal. Actually,

manufactured products of the private sector registered a score of +.4 percent in July. Unquestionably, enterprises are hesitating to allow the consumer to enjoy the entire drop in intermediate costs.

At the same time services forge ahead at a high rate: + 0.5 percent. Here again one reads a warning signal.

This is so even if the quarterly increase in rents explains a large share of the shift. Hairdressers, entertainment and hotels also play their part. They are in the front line of the deregulation promised by the government.

On the whole, the psychological aspects of this index are important for the conduct of economic policy, but they must be viewed in relative terms by the "in situ" observation of a number of summer visitors who from year to year measure the adjustments in retailers' price tags.

11,464

CSO: 3519/243

ECONOMIC

CHARACTERISTICS OF UNEMPLOYED WORKERS REVEALED BY POLL

Paris LE MONDE in French 29 Aug 86 p 22

[Article by Alain Lebaube]

[Text] A BVA survey has revealed the characteristics of unemployed workers not receiving compensation (1.1 million in 1985). Although not demanding regarding their employment, they have few illusions. Many handicaps stand between them and a job and they are difficult to overcome. Their way of life is financially troubled. Fortunately, family solidarity helps a great deal.

With a poll completed based on a survey completed by the BVA at the request of the Ministry of Social Affairs, we now have a better understanding of unemployed workers not receiving compensation. Their existence and exact number had previously been the subject of great controversy. (Footnote 1) (The poll was completed in July 1985 and included a representative sampling of unemployed persons not receiving compensation. The analysis was done by Mireille Elbaum and Philippe Faure and published in the June 1986 issue of the Ministry of Social Affairs and Employment's TRAVAIL ET EMPLOI. Based on UNEDIC estimates, unpaid unemployed persons numbered 1,118,000 on 31 December 1984 and made up 41 percent of all jobseekers. The poll surveyed 75 percent of that population.)

The study distinguished three categories with different behavior and characteristics: unemployed persons never having had access to any compensation, either out of ignorance or rejection of their application; unemployed persons having come to the end of a short period of compensation, mainly young people and women; and unemployed persons having exhausted their right to compensation and having been laid off after a long period of activity.

On the whole, there are more women and young people among the unemployed havinever received compensation, with the system of compensation being more favorable to older wage earners with long years of service. The level of education and qualifications is relatively low, inasmuch as 58 percent are laborers, OS [semi-skilled workers] or unskilled workers. Some 38 percent have no more than an elementary school education.

Generally speaking, their professional experience is long ago or nonexistent. Some 41 percent have never workers and two-thirds have not had a job for the

past 2 years. Their most recent job history shows great instability, with frequent periods of insecure employment and jobs requiring few skills. Over the past 5 years, 42 percent have had at least two successive jobs and 43 percent have had contracts for specific periods of time, temporary and vacation positions, piece work or hourly jobs. Not only did their last job not require skills (63 percent), but it lasted less than a year (55 percent).

Two major groups stand out. On the one hand, one has young people and women and, on the other, "unemployed persons having exhausted their benefits and having shifted from employment to long-time unemployment." In addition, one has repeaters (30 percent), men between the ages of 25 and 39 who are slightly more qualified than the average but handicapped by their health (21 percent).

Neither group has any illusions about its chances. Half believe that they will not find a stable, full-time job and a fourth of them do not even believe they will find any. Skeptical, some 39 percent say they will "perhaps" find a job. And yet, they are not demanding: Some 75 percent would accept an unskilled job and would take a major drop in level. On the average, the wage they demand (4,700 francs) is only slightly over the SMIC [Minimum interprofessional growth wage]. They make few demands: Some 95 percent would accept part-time work, 88 percent temporary work and even jobs known to involve heavy work. The only restrictions: Half would refuse to move or would not put up with a commute of over a half hour.

In their search for a job, unpaid unemployed go to the ANPE (22 percent), ne newspaper ads (19 percent), their families or relatives (16 percent). Their distance from the job market prevents them from using more direct methods and, based on experience, they exhibit some discouragement. These unemployed workers hesitate to renew their efforts, having been unsuccessful in all their attempts. Three-fourths of them have made applications, but only 18 percent have received offers, but without results. In 62 percent of the cases, they obtained no interview with an employer and 19 percent have obtained only one. To explain their failures, they point to personal inadequacy (39 percent) or competition (20 percent). Their requirements do not appear to be an obstacle to work, except perhaps with respect to the wage proposed: an average of 4,200 francs.

Few have taken training (14 percent), although 41 percent have applied. Here again, training does not seem to be a solution for them and they convince themselves of this by mentioning their own difficulty in justify the many refusals they have encountered (50 percent).

In this group, the long-time unemployed workers occupy a peculiar position: They are not as young, not as qualified, not as well-educated, and 20 percent have been fired. They have more health problems, with a fourth of those unemployed for over 3 years being affected by some handicap. Relatively more demanding for possible work, they have more accentuated characteristics: They are more pessimistic about their chances (30 percent have given up), make fewer applications for training and receive more rejections. Their professional relations are fewer and they are in a poorer position for moonlighting.

11,464

CSO: 3519/243

ECONOMIC

INDUSTRY GROUP FORECAST STRONG GROWTH FOR 1987-88

Stockholm DAGENS NYHETER in Swedish 23 Aug 86 p 10

[Article by Jan Magnus Fahlstrom: "15-20 Months Prognosis. Industry Believes in Doubled Growth"]

[Text] The growth rate of the Swedish economy is increasing. Industrial investments, production and export are gathering speed. Private consumption will reach new heights. The ability to compete and the balance of trade remain very healthy. Employment will increase and unemployment will remain under three percent.

We will do that well according to the prognosis for the next 15-20 months published by the economic-political department of the Industrial Union last Friday.

The basis for this optimism is the favorable progress in several West European leading economies, important markets for the Swedish industry.

After a tentative beginning early this year, there are now such clear indications of a boom in Western Europe, according to the report, that a "continuing strengthening seems almost assured." The conditions for a significant and lasting recovery seem to be better than they have been for a long time.

The Industrial Union says that the "upwards correction of the business trend," which has recently taken place in Sweden, is thereby assured and that prospects are good for a new growth phase after the weakening trend in business that began in the fall of 1984.

The Swedish gross national product (GNP, the total production of goods and services) increased by 3.4 percent in 1984 and by 2.3 percent in 1985. According to the prognosis, the growth will continue to slow down to 1.5 percent during 1986. But in 1987 it will take off again to 2.5 percent.

# Twofold Increase

As far as industry production is concerned, the growth will be doubled from 2.0 percent this year to 4.0 percent in 1987. The Industrial Union sees a zero growth in industrial investments in 1986 but an increase of ten percent in 1987.

The volume of export will increase by 5.4 percent in 1987, compared to 4.1 percent this year. Regarding imports, the increase will be larger, from 3.7 to 5.9 percent.

This, combined with the fact that import prices increase faster than export prices, will have as a result that the extremely high surplus in the balance of trade of 33 billion this year will be lowered to 28 billion in 1987.

The exchange surplus, the net exchange of goods and services with the rest of the world including payment of interest, will be lowered from nine to six billion. The business balance with other countries remains positive.

#### Below Limits

Inflation, measured as the increase in consumer prices from December to December, is estimated at 2.5 percent for 1986. Consequently it will be well below the 3.2 percent limit, above which the wage-earners have the right to demand renegatiation of this year's contracts. The Industrial Union is assuming, however, that the interest rate will fall another point during the year.

The inflation average for 1986 is estimated at 4.3 percent. During 1987 is estimated that it will rise somewhat to 4.5 percent, due to increased import prices and continued, relatively rapid increase in the cost of labor per production unit.

The rise in private consumption will remain at 1.9 percent this year, according to the calculations of the Industrial Union, and then increase to 2.5 percent next year.

#### Differs

It has to be noted, that the Industrial Union's prognosis, by assuming a greater increase in consumption in 1987 than in 1986, differs from all the others published in May-June by the economists of banks and wage-earner organizations.

The same is true of the figures for the economic growth, the increase in the GNP. The Industrial Union is alone in counting on a higher rate of increase next year. The Swedish Federation of Trade Unions assumed an unchanged rate of 2.8 percent, the other prognoses a clear weakening.

The economists at the Industrial Union are about four months behind the others, consequently, they have been able to make use of more recent information, the clear signals about a boom in Western Europe, among others.

In other respects, they base their optimism on factors that, as early as this spring, caused the forecasters to revise their opinions in a positive direction: lower oil-prices, dollars, interests and inflation. With the exception of the oil-prices, these factors have been rather strengthened during the summer.

The Industrial Union admits that in addition to the favorable conditions abroad the economic policy has helped:

The government deficit has been cut in half from eleven to five percent of the GNP. The deficit for the consolidated public sector (the state, the local authorities and the Social Security sector) has been brought down to about one percent of the GNP.

Add to this that the two-year contracts in the market place mean a "strong correction in the right direction."

The Industrial Union says that we must not forget to release the investment funds for machinery and inventory during 1987 and 1988. Those are measures that are so urgent that "it must be assumed that they will be implemented" during this fall.

If the investment funds are released they will, according to the authors of the report, give a real boost to the investments when the market prospects as well as the increased ability to compete because of the rate of exchange, especially with West Germany, become apparent.

12339 CSO: 3650/300

**END** 

# END OF FICHE DATE FILMED 28 Oct 1986